APPENDIX J

APPENDIX J

CLOSURE PLAN

CLOSURE PLAN FOR

BADGER DISPOSAL OF WI., INC.
MILWAUKEE, WI

MARCH 2006

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Section 1
INTRODUCTION

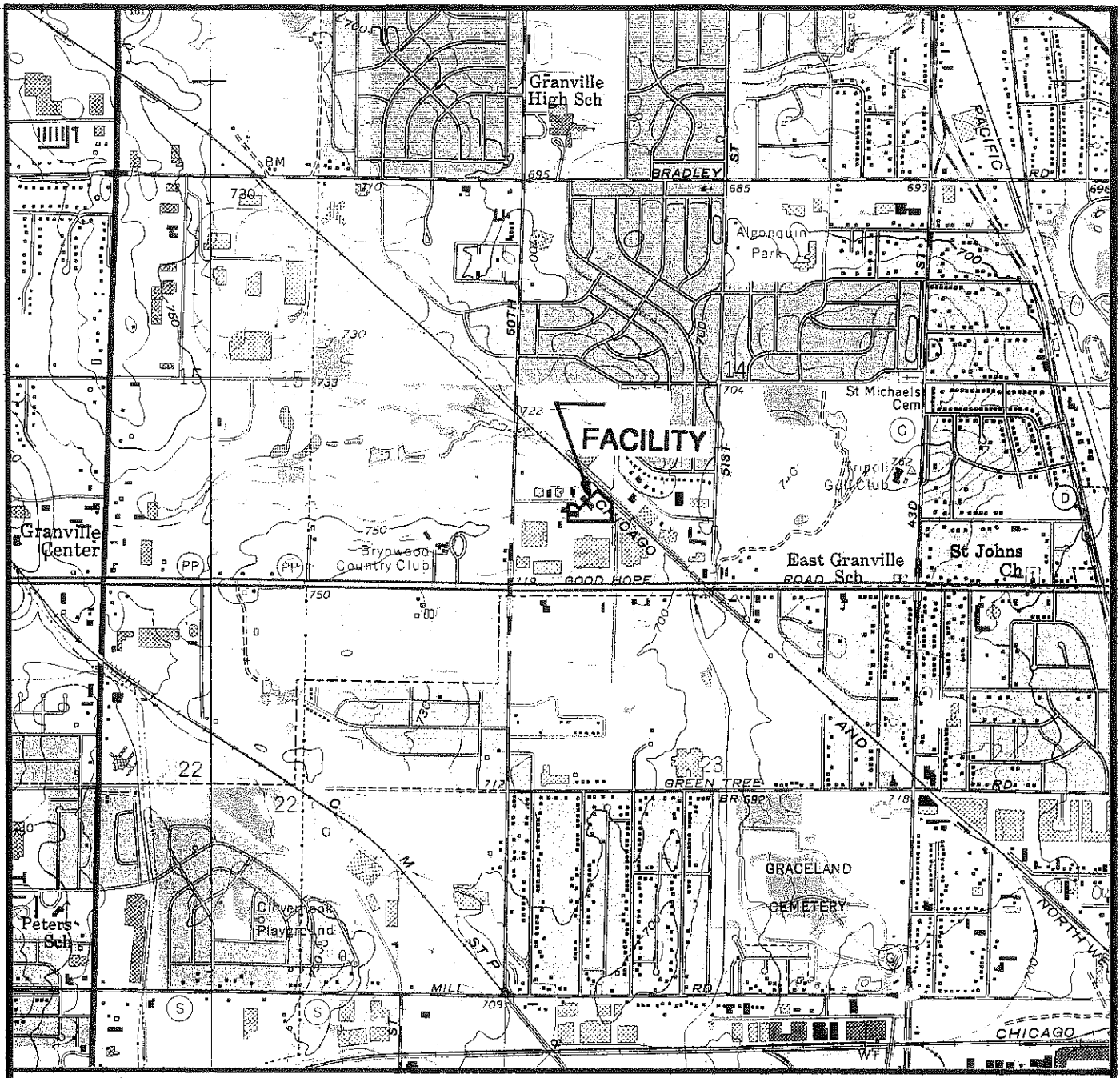
1.1 Background

Badger Disposal of WI., Inc. (Badger Disposal) is currently applying for renewal of a hazardous waste operating license that was issued December 16, 1996. The Badger Disposal facility is located at 5611 West Hemlock Street, Milwaukee, Wisconsin. Badger Disposal occupies approximately 3 acres in an area where the immediately surrounding land is used for industrial purposes. The facility includes the existing transfer facility building and an undeveloped vacant lot to the east. The location of the facility is shown on Figure 1.

This closure plan fulfills, in part, the requirements of Chapter NR 640.16 and NR 645.17, Wisconsin Administrative Code, for a Feasibility and Plan of Operation license.

1.2 Purpose and Scope

The purpose of this Closure Plan is to describe the closure activities that Badger Disposal will perform to close the Milwaukee facility. The plan is intended to fulfill the closure plan requirements in Chapters NR 680.21 and 685.05, Wisconsin Administrative Code. The plan describes the key activities, tests, and performance standards for closing the Badger Disposal facility on West Hemlock Street.



STATE LOCATION

0 2000 4000

SCALE: 1"=2000'

SITE LOCATOR MAP

MILWAUKEE, WI

SOURCE: BASE MAP FROM MENOMONEE FALLS, WI 7.5 MINUTE USGS QUADRANGLE DATED 1958, PHOTOREVISED 1976 AND THIENSVILLE, WI 7.5 MINUTE USGS QUADRANGLE DATED 1958, PHOTOREVISED 1976.

RMT INC.

DWN. BY:	DKJ
APPROVED BY:	THD
DATE:	JULY 1994
PROJ. #	3057.01
FILE #	30570186

FIGURE 1

The scope of this document is limited to providing a Closure Plan for the hazardous waste tank management unit and hazardous waste container management units at the Badger Disposal-Milwaukee Transfer facility. The Closure Plan includes the following:

- Descriptions of the facility and storage areas
- The technical approach that will be used to accomplish closure of the storage areas
- Analytical parameters and performance standards for determining closure, including the method that will be used to establish background levels
- Methods for performing and documenting closure
- Health and Safety issues related to closure activities
- Estimated closure costs and financial assurance
- Decontamination methods for personnel and for equipment used to handle contaminated materials during closure
- Documentation of closure activities

Section 2
GENERAL FACILITY INFORMATION

2.1 Facility Name, Location, and Contact

NAME: Badger Disposal of WI., Inc.

LOCATION: 5611 West Hemlock Street
Milwaukee, WI 53223

CONTACT: Henry J. Krier
President
414-760-9175

EPA ID: WID 988580056

2.2 Site Description and Overview of Waste Management Units

The Badger Disposal facility includes the following hazardous waste units:

- Drum and Tote management areas:

  The first containment management area currently has the capacity to store a maximum of 720 drums (39,600 gallons) of hazardous waste and 1,500 drums (82,500 gallons) of nonhazardous waste or any combination of the above. This area is located inside the process/storage building and consists of approximately 7,000 (not including offices) square feet (see Sheet 9). After completion of the expanded facility, this drum management area will have the capacity to store a maximum of 1,136 drums (62,480 gallons) and a 2,000-gallon blending tank of hazardous wastes or 2,272 drums (124,960 gallons) of nonhazardous waste or any combination of the above and will consist of approximately 14,300 (not including offices) square feet (see Sheet 10).

  The second drum management area will have the capacity to store a maximum of 149 drums or approximately 8,195 gallons of acidic, basic, ignitable, reactive, and oxidizers and two 5,500-gallon above ground storage tanks or approximately 11,000 gallons of acidic and basic materials. This area is proposed in a new building located northeast of

the process/storage building and will consist of approximately 2,100 square feet (see Sheet 11).

- Tank management area:

  The tank management area is proposed to consist of four carbon steel, 12,000 gallon above ground storage tanks or approximately 48,000 gallons. This tank farm area will be located east of the process/storage building (see Sheet 12). The tank farm area (including the loading/unloading pad) will consist of approximately 2,600 square feet.

2.3 Waste Characterization

Table 1 contains a list of the hazardous waste codes that the facility can accept. This list includes both liquid and solid wastes received from industries, commercial establishments, small businesses, educational facilities, and other institutions.

2.4 Maximum Waste Inventory

Badger Disposal shall remove all containers of hazardous waste and all pumpable hazardous waste from the container management and tank management areas prior to closure. At the time of closure, only waste residues shall remain at the facility, primarily as non-pumpable residues. These residues shall be removed during implementation of the Closure Plan.

As required by Chapter NR 685.05(2)(c), this Closure Plan shall include the maximum waste inventory of hazardous waste ever on-site during the active life of the facility. Based on the known capacities of the facility's hazardous waste management units, the maximum waste inventory is estimated at a total of 131,675 gallons of hazardous waste from the container and tank storage areas and 120 cubic yards of bulk solid hazardous waste.

TABLE 1
HAZARDOUS WASTES ACCEPTED

D001	D012	D023	
D002	D013	D024	D034
D003	D014	D025	D035
D004	D015	D026	D036
D005	D016	D027	D037
D006	D017	D028	D038
D007	D018	D029	D039
D008	D019	D030	D040
D009	D020	D031	D041
D010	D021	D032	D042
D011	D022	D033	D043
F001	F008	F022	F032
F002	F009	F023	F034
F003	F010	F024	F035
F004	F011	F025	F037
F005	F019	F026	F038
F006	F020	F027	F039
F007	F021	F028	
K001	K030	K066	K110
K002	K031	K069	K111
K003	K032	K071	K112
K004	K033	K073	K113
K005	K034	K083	K114
K006	K035	K084	K115
K007	K036	K085	K116
K008	K037	K086	K117
K009	K038	K087	K118
K010	K039	K088	K123
K011	K040	K090	K124
K013	K041	K091	K125
K014	K042	K093	K126
K015	K043	K094	K131
K016	K044	K095	K132
K017	K045	K096	K136
K018	K046	K097	K141
K019	K047	K098	K142
K020	K048	K099	K143
K021	K049	K100	K144
K022	K050	K101	K145
K023	K051	K102	K147
K024	K052	K103	K148
K025	K060	K104	K149
K026	K061	K105	K150
K027	K062	K107	K151
K028	K064	K108	
K029	K065	K109	

TABLE 1
HAZARDOUS WASTES ACCEPTED

P001	P030	P063	P096
P002	P031	P064	P097
P003	P033	P065	P098
P004	P034	P066	P099
P005	P036	P067	P101
P006	P037	P068	P102
P007	P038	P069	P103
P008	P039	P070	P104
P009	P040	P071	P105
P010	P041	P072	P106
P011	P042	P073	P107
P012	P043	P074	P108
P013	P044	P075	P109
P014	P045	P076	P110
P015	P046	P077	P111
P016	P047	P078	P112
P017	P048	P081	P113
P018	P049	P082	P114
P020	P050	P084	P115
P021	P051	P085	P116
P022	P054	P087	P118
P023	P056	P088	P119
P024	P057	P089	P120
P026	P058	P092	P121
P027	P059	P093	P122
P028	P060	P094	P123
P029	P062	P095	

TABLE 1
HAZARDOUS WASTES ACCEPTED

U001	U063	U125	U186
U002	U064	U126	U187
U003	U065	U127	U188
U004	U066	U128	U189
U005	U067	U129	U190
U005	U068	U130	U191
U006	U069	U131	U192
U007	U070	U132	U193
U008	U071	U133	U194
U009	U072	U134	U196
U010	U073	U135	U197
U011	U074	U136	U200
U012	U075	U137	U201
U014	U076	U138	U202
U015	U077	U139	U203
U016	U078	U140	U204
U017	U079	U141	U205
U018	U080	U142	U206
U019	U081	U143	U207
U020	U082	U144	U208
U021	U083	U145	U209
U022	U084	U146	U210
U023	U085	U147	U211
U024	U086	U148	U212
U025	U087	U149	U213
U026	U088	U150	U214
U027	U089	U151	U215
U028	U090	U152	U216
U029	U091	U153	U217
U030	U092	U154	U218
U031	U093	U155	U219
U032	U094	U156	U220
U033	U095	U157	U221
U034	U096	U158	U222
U035	U097	U159	U223
U036	U098	U160	U225
U037	U099	U161	U226
U038	U101	U162	U227
U039	U102	U163	U228
U041	U103	U164	U230
U042	U105	U165	U231
U043	U106	U166	U232
U044	U107	U167	U233
U045	U108	U168	U234
U046	U109	U169	U235
U047	U110	U170	U236
U048	U111	U171	U237
U049	U112	U172	U238
U050	U113	U173	U239
U051	U114	U174	U240
U052	U115	U176	U242
U053	U116	U177	U243
U055	U117	U178	U244
U056	U118	U179	U246
U057	U119	U180	U247
U058	U120	U181	U248
U059	U121	U182	U249
U060	U122	U183	U328
U061	U123	U184	U353
U062	U124	U185	U359

Section 3

CLOSURE PERFORMANCE STANDARDS

3.1 Objectives

Badger Disposal intends to close the RCRA hazardous container management area in a manner that satisfies Chapter NR 685.05(1), Wisconsin Administrative Code. To accomplish this, the regulations indicate that Badger Disposal shall do the following:

- Minimize the need for further maintenance.
- Control, minimize, or eliminate to the extent necessary to protect human health and the environment, and to prevent the post-closure escape of hazardous wastes or hazardous constituents.

These requirements shall be satisfied by documenting the following:

- Concrete surfaces, tank interiors, and other structures associated with the hazardous waste management systems or structures have been decontaminated or dismantled, and decontamination rinsate samples meet the performance standards described in this closure plan.
- Residues generated during facility decontamination and closure activities have been managed as described in this Closure Plan.

In general, closure activities shall follow the approach presented in the following section.

3.2 Closure Approach

Closure activities will likely take place in stages after removal of all waste materials—decontamination of the storage units, and sampling and analysis of the decontamination rinsate. Final methods, sequencing, and staging shall be determined by closure personnel. In general, closure activities shall consist of the following:

- Buildings and associated structures that may have been in contact with hazardous waste or hazardous constituents shall be decontaminated. Decontamination shall generally involve power-washing using wash and rinse liquids. Some structures and associated electrical components shall be physically scraped, brushed, or hand-washed rather than power-washed due to the sensitivity of the equipment for power-washing.
- Tanks, piping and associated structures that may have been in contact with hazardous waste or hazardous constituents shall also be decontaminated. Decontamination shall generally involve removing any residual sludges from the structures and power-washing using wash and rinse liquids. Some structures and associated electrical components

shall be physically scraped, brushed, or hand-washed rather than power-washed due to the sensitivity of the equipment for power-washing.

- Following decontamination of buildings, tanks, and associated structures, other areas which potentially contacted hazardous waste shall be decontaminated.

Specific closure activities for the various hazardous waste management units are described in Section 4 of this Closure Plan.

3.3 Performance Standard for Decontamination

The container management and tank management areas shall be decontaminated primarily by power-washing. Decontamination rinsate samples shall be collected and analyzed as described in Section 4 and in Appendix A. Laboratory results shall be compared to the following regulatory concentrations, and decontamination shall be complete when these concentrations are achieved:

- Public drinking water Maximum Contaminant Level (MCL) as promulgated in 40 CFR 141 for inorganics, and 40 CFR 141.12 for organics.
- If a MCL has not been established, the Maximum Contaminant Level Goal (MCLG) as promulgated in 40 CFR 141.30, shall then be used.
- If neither a MCL nor a MCLG has been established, 1.0 mg/L shall be used as the clean-closure standard for decontamination. (Note, if the MCL or MCLG is less than the constituent's analytical reporting limit, the reporting limit shall then be used as the clean-closure standard.)

Table 2 contains a list of the constituents of concern for the container and tank management areas final decontamination rinsates.

Table 2
CONSTITUENTS OF CONCERN FOR THE TANK MANAGEMENT AREA
AND CONTAINER MANAGEMENT AREA CONTAMINATION RINSATES

VOLATILE ORGANIC COMPOUNDS		
Acrolein	1,2-Dichloropropane	Tetrachloroethylene
Acrylonitrile	1,3-Dichloropropylene	Toluene
Benzene	1,1-Dichloroethane	trans-1,2-Dichloroethylene
Bromoform	1,2-Dichloroethane	1,1,1-Trichloroethane
Carbon tertrachloride	1,1-Dichloroethylene	1,1,2-Trichloroethane
Chlorobenzene	Ethylbenzene	Trichloroethylene
2-Chloroethylvinyl ether	Methyl bromide	Vinyl chloride
Chloroform	Methyl chloride	
Dichlorobromomethane	1,1,2,2-Tetrachloroethane	
ACID EXTRACTABLE COMPOUNDS		
2-Chlorophenol	2,4-Dinitrophenol	Pentachlorophenol
2,4-Dichlorophenol	2-Nitrophenol	Phenol
2,4-Dimethylphenol	4-Nitrophenol	2,4,6-Trichlorophenol
4,6-dinitro-o-cresol	p-Cloro-m-cresol	
BASE/NEUTRAL EXTRACTABLE COMPOUNDS		
Acenaphthene	Hexachlorobutadiene	2-Chloronaphthalene
Acenaphthylene	Hexachlorocyclopentadiene	4-Chlorophenyl phenylether
Anthracene	Hexachloroethane	Chrysene
Benzidine	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene
Benzo(a)anthracene	Isophorone	1,2-Dichlorobenzene
Benzo(a)pyrene	Naphthalene	1,3-Dichlorobenzene
Benzo(b)fluoranthracene	Nitrobenzene	1,4-Dichlorobenzene
Benzo(ghi)perylene	N-Nitrosodimethylamine	3,3-Dichlorobenzidine
Benzo(k0fluoranthene	N-Nitrosodi-n-propylamine	Diethyl phthalate
bis(2-Chloroethoxy)methane	N-Nitrosodiphenylamine	Dimethyl phthalate
bis(2-Chloroethyl)ether	Phenanthrene	Di-n-butyl phthalate
bis(2-Chloroisopropyl)ether	Pyrene	1,2-Diphenylhydrazine
bis(2-Ethylhexyl)phthalate	1,2,3-Trichlorobenzene	Fluoranthene
4-Bromophenyl phenylether		Fluorene
Butylbenzyl phthalate		Hexachlorobenzene

Table 2
CONSTITUENTS OF CONCERN FOR THE TANK MANAGEMENT AREA
AND CONTAINER MANAGEMENT AREA CONTAMINATION RINSATES

PESTICIDES/PCBs		
Aldrin	Dieldrin	PCB-1016
alpha-BHC	Endosulfan (I)	PCB-1221
beta-BHC	Endosulfan (II)	PCB-1232
gamma-BHC	Endosulfan sulfate	PCB-1242
delta-BHC	Endrin	PCB-1248
Chlordane	Endrin aldehyde	PCB-1254
4,4'-DDT	Heptachlor	PCB-1260
4,4'-DDE	Heptachlor epoxide	
4,4'-DDD	Toxaphene	
INORGANICS		
Arsenic	Chromium	Selenium
Barium	Lead	Silver
Cadmium	Mercury	
MISCELLANEUOS		
pH	Cyanides	Phenols

Section 4
CLOSURE METHODS

4.1 Decontamination of the Hazardous Waste Storage Units

The container management areas are located inside the buildings, with cement block walls and a concrete floor. These areas were primarily used for drummed storage of hazardous liquids and blending of hazardous waste in a 2,000-gallon blending tank. In addition, a Roll-Off storage area located north of the lab pack building was used to store bulk quantities of solid and hazardous wastes and consists of an approximately 1,200 square foot concrete pad.

The 48,000-gallon tank farm and two 5,500-gallon above ground storage tanks make up the tank management unit. The 48,000-gallon tank farm consists of a concrete containment area and a concrete loading/unloading area located west of the lab pack building. The two 5,500-gallon above ground tanks are located in the lab pack building and consist of two concrete containment areas. These areas were primarily used to store bulk quantities of hazardous wastes and fuels.

Decontamination of the container management areas shall consist of the following:

- The concrete floor surface of the unit shall be physically scraped to remove visible residues. The solid residues shall be collected and managed as discussed in Subsection 4.2.
- The concrete floor shall be power-washed using an industrial-strength detergent and rinsed with water. The wash/rinse cycle shall be repeated as needed, but at lease once, to adequately decontaminate the units. Aqueous residues generated during the decontamination of the unit shall be collected and managed as discussed in Subsection 4.2.
- After the last wash/rinse cycle has been completed, a final rinse of the concrete floor shall be performed. Rinsate from the final rinse shall be collected and sampled. The final rinsate sample shall be laboratory-analyzed as discussed in Subsection 4.3.

Decontamination of the tank management areas shall consist of the following:

- The tank interiors, concrete floor and wall surfaces of the unit shall be physically scraped to remove visible residues. The solid residues shall be collected and managed as discussed in Subsection 4.2.

- The tank interiors, concrete floor and walls shall be power-washed using an industrial-strength detergent and rinsed with water. The wash/rinse cycle shall be repeated as needed, but at lease once, to adequately decontaminate the units. Aqueous residues generated during the decontamination of the unit shall be collected and managed as discussed in Subsection 4.2.

- After the last wash/rinse cycle has been completed, a final rinse of the concrete floor shall be performed. Rinsate from the final rinse shall be collected and sampled. The final rinsate sample shall be laboratory-analyzed as discussed in Subsection 4.3.

After decontamination is completed a visual inspection of each storage and treatment unit containment structure is completed to determine if any cracks or imperfections exist which may result in a release to the environment.

4.2 Residuals Management

Residues generated during decontamination of the storage units shall be collected and managed in accordance with state and federal regulations. Generator requirements shall be followed until laboratory results are available. Solid residues, equipment, or tanks for which decontamination is infeasible or impractical shall be dismantled and placed directly into drums or roll-off containers and properly labeled. The containerized waste shall be manifested and transported off-site to a permitted hazardous waste landfill or incinerator.

Personal protective equipment (i.e., Tyvek® coveralls, disposable booties, etc.) used during the decontamination activities shall be containerized and transported off-site to a permitted waste facility. Decontamination liquids, resulting primarily from power-washing activities, shall be collected, containerized, and properly labeled. Rinsate liquids shall be collected by impounding a volume of water on the surface with an impermeable barrier. Water shall be retrieved by vacuuming or pumping the ponded water into appropriate containers.

It is Badger Disposal's intent to discharge the decontamination liquids to a publicly owned treatment works (POTW) for treatment. Prior to discharging to the POTW, the containerized liquids shall be sampled for characterization in accordance with the sampling methods presented in Appendix A. These samples shall be laboratory-analyzed for compounds required by the POTW.

Badger Disposal may elect to manage the decontamination liquids as a hazardous waste, rather than dispose of the liquids at a POTW. If Badger Disposal should do so, the containerized liquids shall be manifested and transported off-site to a permitted hazardous waste facility.

All liquid residues generated from the decontamination activities shall be temporarily staged at the storage area until analytical data are reviewed and approval for disposal is received.

4.3 Confirmation Sampling

After completing the final wash/rinse cycle, a final rinse shall be performed on the tank interiors and storage areas. The final rinsate shall be collected, sampled, and analyzed. Final rinsate sampling, chain-of-custody, and preservation procedures discussed in Appendix A shall be used to collect the rinsate samples. Rinsate samples shall be collected as outlined in Table 3.

The final rinsate samples shall be laboratory-analyzed for hazardous constituents managed at the facility. The constituents of concern are listed in Table 2.

If the results of the rinsate analyses indicate that the closure performance standards described in Section 3 have been achieved, the unit shall be considered decontaminated. If results of the analyses indicate that the closure performance standards have not been achieved, the unit shall be further decontaminated and resampled.

TABLE 3
SUMMARY OF RINSATE SAMPLE COLLECTION

Unit/Area	No. of Samples	Description
Container Management Area Process/Storage Building	6	One sample of final rinse of the floor of the drum staging area. Five samples of final rinse of the floor of the drum storage area.
Container Management Area Lab Pack Building Storage	6	One sample of final rinse of the floor of the drum staging area. One sample of final rinse from the floor of each of the five drum storage conatinment areas.
Container Management Area Bulk Solids (Roll-Off) Storage	2	Two samples of the final rinse of the floor of the drum staging area.
Tank Management Area 48,000-Gallon Tank Farm	4	Three samples of final rinse of the floor of the tank containment area. One sample of final rinse from the floor of the loading/unloading area.
Tank Management Area Two 5,500-Gallon Tanks in Lab Pack Building	2	One sample of final rinse of the floor in each tank containment area.
Minimum Total	20	

Section 5
CONSTRUCTION QUALITY CONTROL

5.1 General

Qualified personnel shall be selected for implementation of the Closure Plan. As discussed in Section 11, an independent professional engineer shall observe the work conformance to the approved closure plan.

Section 7 of this Closure Plan specifies minimum health and safety requirements for closure activities. The selected personnel shall be responsible for developing a job- or site-specific health and safety plan. This health and safety plan shall be submitted for WDNR review as discussed in Section 7.

5.2 Construction Practices

During washing and rinsing activities, care shall be taken to control the dispersal of liquids. Barriers shall be placed at door openings or other locations to reduce the migration of liquids on the floor. Plastic sheeting may be used to protect sensitive equipment from water spray.

Flexibility will be allowed to sequence closure activities in the most efficient manner, consistent with the closure performance standards outlined in Section 3. Care shall be taken to avoid re-introduction of contaminated equipment, materials, or wash waters into areas already designated as clean.

5.3 Documentation

Activities in the field shall be observed by the independent professional engineer. Specific quality control tasks by the engineer shall include the following:

- Documentation of concrete and tank decontamination activities
- Collection of rinsate samples for confirmatory analyses
- Coordination of sample analyses with analytical laboratory(s)
- Rinsate data interpretation and recommendations for additional cleaning, if necessary

- Review of site conditions during cleaning operations and identification of actual or potential migration pathways of hazardous waste to the subsurface if cracks, etc., are identified

Field activities shall be documented in writing, and work not meeting the requirements of the Closure Plan shall be related to Badger Disposal. Corrections to the work which are performed to conform to the Closure Plan shall be documented.

Section 6
HEALTH AND SAFETY

Prior to starting the closure activities, a site-specific health and safety plan for closure activities shall be developed by each company involved to protect their workers on the site. This plan shall be submitted to the WDNR for review at least 30 days prior to beginning closure activities. The workers' employer shall be responsible for implementing the plan, directing the training of personnel, and for providing safety equipment and incidentals as required. At a minimum, the plan(s) shall address the following:

- Chemical and physical hazard evaluation
- Levels of protection - personal protective clothing and respiratory protection for persons performing closure activities and criteria used to downgrade or upgrade protective equipment in response to environmental changes during closure
- Air monitoring to ensure proper protective equipment for the conditions, including monitoring methods to be used
- Standard operating safety procedures
- Site control descriptions which delineate work zones, decontamination procedures for personnel and equipment, and site security measures
- Contingency plan which includes contacts and procedures for dealing with emergencies
- Medical evaluation and certification and worker training and certification

The plan shall be directed at compliance with applicable federal, state, and local requirements as a minimum. The following references shall be used to assist in the development of the site-specific health and safety plan:

- "Standard Operating Safety Guides," USEPA, November 1984, Chapter 9
- "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," NIOSH/OSHA/USCG/EPA, October 1985
- U.S. Department of Labor, Occupational Safety and Health Standards and Regulations, including, but not limited to, 29 CFR 1910.120, 1910.132, 1910.133(a), 1910.134, 1910.135, 1910.136, 1910.1200, and 1926, Hazardous Waste Operations and Emergency Response

Section 7
DECONTAMINATION

Specific decontamination procedures are dependent on the equipment used. These details will not be available until remediation personnel have been selected. Decontamination of personnel and equipment shall be documented by a qualified, independent engineer registered in the state of Wisconsin (or his representative). General decontamination procedures are described below.

7.1 Site Control

Access to the closure construction areas shall be restricted to personnel involved in closure activities and to authorized Badger Disposal personnel. Tape and signs identifying the closure construction areas shall be installed at access points.

7.2 Personnel Decontamination

Personnel leaving individual management units after contact with residual waste materials or accumulated rinsate shall be decontaminated consistent with OSHA 1910.120. The contractor shall be responsible for ensuring that his personnel comply with the decontamination procedures specified in OSHA 1910.120. Personnel decontamination equipment and facilities shall be located within the closure area. The exact location shall be determined by the contractor, based on logistics.

7.3 Equipment Decontamination

Construction equipment and cleaning equipment in contact with potentially contaminated structures or water shall be decontaminated prior to exiting the facility. The concrete loading/unloading area for the 48,000-gallon tank farm may be used as a decontamination area. If this area is not large enough to accommodate the largest piece of equipment or the rinsate generated during decontamination, a decontamination pad shall be constructed. The location of the decontamination pad, if it is necessary to construct one, shall be determined by the contractor, based on logistics.

Equipment shall be decontaminated by physical methods wherever possible (scraping, brushing, etc.) followed by at least three separate rinses. Water will be allowed to flow to the drain within the containment area or the constructed decontamination pad (if necessary) for collection and transport to a wastewater treatment facility.

7.4 Residuals Management

Residues and debris generated from decontamination of personnel and equipment shall be managed in accordance with state and federal regulations. Solid residues, including discarded personal protective equipment, shall be collected and placed into a waste container designated by Badger Disposal. Liquid residues shall be collected by installing temporary dikes and shall be transported to an appropriate treatment facility for treatment.

After final equipment decontamination, the decontamination area shall be double-washed and rinsed. Liquids shall be conveyed to a wastewater treatment facility for treatment as described above. Decontamination of the decontamination area shall be documented as described in Subsection 4.1.

If it is necessary to construct a decontamination pad, the pad shall be demolished after completing decontamination activities. The debris shall be transported off-site to a licensed landfill.

Section 8
CLOSURE SCHEDULE

Badger Disposal has indefinite life because it is strickly a recycling facility. Badger Disposal has an expected life of 50 years. The entire facility will operate until closure. Therefore, no partial closure is anticipated. At least 180 days prior to beginning closure activities, Badger Disposal shall notify the WDNR in writing of its intent to close the facility.

The duration of closure construction activities is estimated to require 4 to 6 weeks, assuming 5-day work weeks. A contingency has been added to provide for possible additional re-cleaning of various units or equipment. The total time spent on construction activities, including soil sampling, is therefore estimated at 6 to 8 weeks.

The phasing and sequencing of work in specific areas is uncertain, and will depend on personnel logistics and scheduling once work has begun. Badger Disposal shall provide progress updates and shall communicate various milestones to the WDNR as work proceeds. Badger Disposal shall also inform the WDNR at least 5 working days prior to the occurrence of key events during closure.

Section 9

CLOSURE COST ESTIMATE

A summary of the estimated costs for implementing this closure plan are contained in Table 4.

The cost estimate is located in Appendix A. These costs are based on the following:

- Costs for closure services are based on Spectrum Engineering, Inc.'s experience on similar projects.
- Costs for engineering and soil sampling services are estimated by Spectrum Engineering, Inc., based on the presently defined scope and their experience on similar projects.
- The unit costs for on-site cleaning tasks include the required labor, equipment, and materials for washing, rinsing, residuals handling, etc.
- A project administration cost has been applied to cover miscellaneous costs not associated with specific work tasks.
- The estimates of the volume or mass of bulk material for off-site disposal are approximate only, due to uncertainties over what can and cannot be practicably decontaminated.

TABLE 4

CLOSURE COST ESTIMATE

Closure Activities	Unit Cost	Quantity	Total ($)
Recycling/Disposal of Hazardous Waste Drum Inventory	non-responsive	1,136	$45,440.00
Recycling/Disposal of Lab-Pack Drum Inventory		145	$25,375.00
Recycling/Disposal of Bulk Liquid Hazardous Waste Inventory		61,000	$17,080.00
Recycling/Disposal of Bulk Solid Hazardous Waste Inventory		120	$7,200.00
Transportation Costs		16	$5,600.00
Storage Areas -decontaminate floor surfaces -decontaminate tank systems -rinsate analyses		 1 1 20	 $10,500.00 $5,200.00 $6,600.00
Closure-Derived Waste Management -solid residues -liquid residues		 5,000 30,000	 $5,000.00 $15,000.00
Engineering -closure observation -documentation report		 10 1	 $12,000.00 $10,000.00
Sub Total			$164,995.00
10% Contingency	non-	1	$16,499.50
TOTAL			**$181,494.50**

Revised September 15, 2006

Section 10
CERTIFICATION OF CLOSURE

An independent professional engineer registered in the state of Wisconsin (or representative) shall be present during critical closure activities.

When closure is completed, the independent engineer shall document that the waste management area has been closed in accordance with the concepts of the approved closure plan. A closure documentation report shall be submitted to the WDNR within 60 days of the completion of the closure activities.

The owner and engineer shall sign the following certification statement as required by NR 685(10):

> "I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Information which supports the Closure Documentation Report and the certification shall be retained, pending approval of the Documentation Report.

Section 11

FACILITY STATUS AFTER CLOSURE

After closure of the Badger Disposal facility, no further RCRA hazardous waste activity shall be performed by Badger Disposal at this location. After all decontamination has been completed and site closure has been completed, the buildings and property may be used for other commercial or industrial business.

Section 12

REFERENCES

NIOSH/OSHA/USCG/EPA. 1985. Occupational safety and health guidance manual for hazardous waste site activities. October 1985.

USEPA. 1984. Standard operating safety guides.

Appendix A

LETTER OF CREDIT

TOWN BANK of Delafield

IRREVOCABLE LETTER OF CREDIT FOR CLOSURE (1143-C)

Dear Secretary, Department of Natural Resources:

We hereby establish our Irrevocable Letter of Credit No. 1143-C in favor of the State of Wisconsin Department of Natural Resources as beneficiary, at the request and for the account of Badger Disposal of WI, Inc., 5611 West Hemlock Street, Milwaukee, WI 53223 as customer, up to the aggregate amount of $172,000.00 available upon presentation of:

1. A sight draft, bearing reference to this letter of credit no. 1143-C together with
2. A signed statement declaring that the amount of the draft is payable pursuant to regulations issued under the authority of section 289.41, Wisconsin Statues, as amended.

Whereas the customer owns a solid waste land disposal facility named Badger Disposal of WI, Inc. located in City of Milwaukee, Milwaukee County, Wisconsin, and that the facility is subject to the closure requirements of the plan of operation approval issued by the beneficiary, dated the 3rd day of July, 2003, and any amendments thereto.

This Letter of Credit is written to provide proof of financial responsibility pursuant to section 289.41, Wisconsin Statues, and section NR 520.05, Wisconsin Administrative Code, as amended, to ensure compliance with the closure requirements of the plan of operation approval, and any amendments thereto, and shall inure to the benefit of the beneficiary.

This Letter of Credit is effective on November 21, 2005, and shall expire on December 5, 2006, except that this Letter of Credit shall automatically renew on the termination date for a term of one year and annually thereafter on each successive termination date until all of the closure requirements have been completed, unless we elect to cancel this Letter of Credit. In the event we wish to cancel this Letter of Credit, we shall provide notice in writing of our intent to cancel to the beneficiary by registered or certified mail not less than 90 days prior to the end of the current term of this Letter of Credit. Unless the customer delivers to the beneficiary a replacement Letter of Credit or other acceptable proof of financial responsibility under section 289.41, Wisconsin Statues, we will pay to the beneficiary the unused balance of this letter of credit on the termination date.

Whenever this Letter of Credit is drawn on under and in compliance with the terms of this credit, we will duly honor such draft upon presentation to us.

All or any part of this Letter of Credit may be drawn upon by the beneficiary, upon written request of the Secretary of the beneficiary, and in accordance with section NR 520.06,Wisconsin Administrative Code, as amended, to be used to carry out the closure requirements of the plan of operation approval, and any amendments thereto, if the customer or any successor in interest fails to do so.

I hereby certify that I am authorized to execute this Letter of Credit on behalf of Town Bank, 400 Genesee Street, Delafield, WI 53018, a bank or financial institution located within the State of Wisconsin, which is examined and regulated by the state or a federal agency.

Sincerely;

Christopher S. Zirbes
Vice President

11/21/05
(Date signed)

This credit is subject to the Wisconsin Uniform Commercial Code and the uniform Customs and Practice for Documentary Credits as most recently published by the International Chamber of Commerce. In the event of inconsistency, the Wisconsin Uniform Commercial Code shall apply.

APPENDIX K

APPENDIX K

OPERATION AND MAINTENANCE MANUAL

OPERATION AND MAINTENANCE MANUAL

Prepared by:
RMT, INC.
WAUKESHA, WISCONSIN

SEPTEMBER 1994

UPDATED BY BADGER DISPOSAL OF WI., INC.

MARCH 2006

TABLE OF CONTENTS

List of Figures

Section 1
FACILITY IDENTIFICATION INFORMATION
NR 640.06(2)(d)(1)/645.06(2)(d)(1)

1.1 Project Title

Badger Disposal of WI., Inc.
Hazardous Waste Storage and Recycling
5611 West Hemlock Street
Milwaukee, Wisconsin 53223

EPA ID# WID988580056

1.2 Engineering Consultants

The following engineering consultants were involved in various phases of the Badger Disposal facility design:

- Residuals Management Technology, Inc. – John Cimermancic, P.E.
- Graef, Anhalt, Schloemer and Associates Inc. – Gary J. Rollinger, P.E.
- Engineering and Environmental Services - Ron Bannister, P.E.

No design changes from the original Feasibility and Plan of Operation Report are planned at this time.

1.3 Site Owner

The Badger Disposal of WI., Incorporated site is owned by: Badger Investments Realty, LLC, 5611 West Hemlock Street, Milwaukee, WI 53223

1.4 Licensee and Operator

The facility Licensee is Badger Disposal of WI., Inc. The facility is operated by Henry J. Krier, President.

1.5 Site Size

The property on which the Badger Disposal facility is located covers approximately 3 acres.

1.6 Site Life and Design Capacity

Badger Disposal has an indefinite life because it is a recycling facility. Badger Disposal has an expected life of 50 years.

Badger Disposal is a commercial recycling complex for waste solvents, paints, sludges, and various other organic and inorganic materials. The complex, which includes some non-regulated activities, is located at 5611 West Hemlock Street, Milwaukee, WI 53223, telephone number (414) 760-9175, in an industrialized area of northwestern Milwaukee. Badger Disposal's operations consist of various processes for recovering, re-packing, reclaiming, and/or recycling organic materials generated by a wide variety of industries located throughout Wisconsin and the Midwest. The existing Badger Disposal facility includes one process/storage building. The proposed Badger Disposal facility includes three buildings and bulk tankage for storing of the blended fuels, waste acid and waste caustic.

The existing building as shown in Sheet 9 of 18 in Appendix P is permitted to store 720 – 55 gallon hazardous waste containers or their equivalents and 1,500 – 55 gallon drums or their equivalents. Since the total of 720 – 55 gallon containers of hazardous waste and 1,500 – 55 gallons of solid waste is greater than the allotted space, the maximum storage available is 1,720 – 55 gallon drums. A copy of the Conditional Class 1 Modification Determination from the WIDNR dated April 6, 2004 outlining storage is located in Appendix O.

The proposed addition to the existing building as shown in Sheet 10 of 18 in Appendix P will perform the following functions:

- Storage of up to 492 hazardous waste containers (non-ignitable wastes)
- Storage of up to 984 non-hazardous waste containers (non-ignitable wastes)

The Badger Disposal lab pack building as shown in Sheet 11 of 18 in Appendix P is intended to provide the following functions:

- Provide contained storage of up to 145 drums in up to 29 drum increments of acidic, basic, ignitable, reactive, and oxidizers
- Provide lab pack bays whereby lab packs quantities of material are repacked into larger quantities (55 gallon drums) for bulking into tanks contained within the labpack building, transfer to the process building for processing into fuels, or for ultimate shipment for disposal or recycling
- Provide a mechanical equipment area for support of the lab pack bay area scrubber system (ventilation equipment, carbon adsorber, alkaline oxidation scrubber)
- Provide bulk storage, loading and unloading facilities for storage of waste acid and waste caustic.
- Provide a shop office area for administrative functions involving the lab pack operations

The Badger Disposal Tank Farm is proposed to provide storage of 48,000 gallons of blended fuels in 4 – 12,000 gallon storage tanks.

1.7 Industries Served

Badger Disposal currently serves over 900 clients which include a variety of commercial, institutional, governmental and industrial companies nationwide that do not generate bulk quantities of waste. The primary function of this facility is bulking and transfer of hazardous and nonhazardous wastes in order to gain access to secondary markets. Customers include the following:

- Colleges and Universities
- Printing Companies
- Government Institutions
- Pharmaceutical Manufacturers
- Environmental Consultants
- Chemical Manufacturers
- Automobile Dealerships
- Automobile Manufacturers
- Railroads
- Can Manufacturers
- Film Manufacturers
- Adhesive Manufacturers
- Machine and Parts Manufacturers

1.8 Waste Types and Quantities

The waste types and quantities accepted at Badger Disposal are listed in the Part A Application which is located in Appendix A of the Feasibility and Plan of Operation Report.

1.9 Exemptions Applied for

Badger Disposal is a licensed hazardous and solid waste storage facility which provides hazardous waste services and solid waste services to generators of solid and hazardous waste. Badger Disposal has operated the facility since September 1, 1990. Badger currently provides services for clients which include a variety of commercial, institutional, governmental and industrial companies nationwide that do not generate bulk quantities of waste. The primary function of this facility is the bulking and transfer of

hazardous and non hazardous waste in order to gain access to secondary markets which include recycling and fuel blending.

Fuel blending operations such as those conducted at Badger Disposal's facility are deemed exempt recycling operations, so long as the facility applies for a written exemption under Wis.

Admin. Code Chapter NR 625 and meets the requirements contained therein. On July 3, 1996, Badger Disposal submitted a hazardous waste fuel blending recycling exemption request to the WIDNR. This exemption application documented that Badger Disposal is a fuel blender engaged in beneficial use or reuse of hazardous waste and is in compliance with the requirements for such exempt facilities imposed by Wis. Admin. Code Sections NR 625.07 and 625.08.

On August 23, 1996, Badger Disposal received a Conditional Approval for Legitimate Recycling Exemption – Hazardous Waste Burned from the WIDNR. A copy of the Conditional Approval for Legitimate Recycling Exemption is located in Appendix B.

Section 2
SPECIFICATIONS FOR SITE CONSTRUCTION AND OPERATION
NR 640.06(2)(d)(2)/NR 645.06(2)(d)(2)

2.1 Basic Design Parameters

Badger Disposal's regulated waste management activities are segregated into two waste management units: 1) the Container Management Unit, and 2) the Tank Management Unit. Each includes specific areas, processes, and equipment within the complex as shown in the drawings.

In addition, the Badger Disposal complex includes various non-regulated areas such as laboratories, administrative offices, maintenance areas, personnel locker rooms, electrical power rooms, and the equipment operated by Badger Disposal for reclamation, product storage, and processing.

The following discusses those RCRA-regulated process activities at the Badger Disposal complex. This process information includes discussion of the various safety features, design parameters, methods for preventing run-off, management of all containment areas and specific design drawings for equipment located in each of the waste management units. Specific drawings discussed in this section are included in the packages that make up Appendix P and Q.

2.2 Container Management Unit

The Container Management Unit employs a number of methods to empty and/or otherwise process containerized wasted received at the Badger Disposal complex. These can include: 1) the lab pack consolidation, 2) solid waste consolidation roll-off, and/or 3) drum pumping station for fuel blending, 4) drum pumping for acid waste bulk consolidation, 5) drum pumping for caustic waste bulk consolidation, 6) return of waste to generator.

2.2.1 Loading/Unloading Docks

Based on the prequalification information and initial sampling of materials shipped, the containerized waste materials are directed to one of the following unloading docks:

Dock Number 1: This dock receives all containerized materials determined to be processable in either Phase I of the DHS (liquids and liquefiable/processable solids), or where the physical characteristics of the waste are uncertain and further sampling can be accomplished prior to assigning to a processing unit.

Dock Number 2: This dock is primarily used for receipt of material destined for processing liquefiable solids, non-liquefiable/processable or compressible solids, and outbound shipment of roll-off containers filled with non-liquefiable/processable solids.

Dock Number 3: This dock is utilized for the receipt of lab pack quantities of material (acids, bases, oxidizer, reactive, ignitable, etc.) for consolidation into larger drum quantities and for loading of consolidated lab packs for transport directly to disposal or Dock Number 1 for unloading and either temporary storage in the appropriate area for further consolidation or recovery in the fuel blending program. Drum quantities of acids and bases will also be received here for consolidation into bulk storage tanks. Materials received at this dock may be unloaded and transported into one of the five lab pack consolidation areas or the associated 29 drum staging area.

Bulk Tanker Truck Loading/Unloading Area: This dock may be used for inbound or outbound shipment of tank trucks up to 6,000 gallons of liquid hazardous waste fuels. This dock will also be utilized to load outbound shipments of up to 5,300 gallons of waste acid or waste caustic for disposal. Once the material is unloaded, it may be positioned directly to the designated process area or may be stored within one of the assigned areas for later introduction into the process. The containers may also be segregated and reloaded for transfer to another dock.

By providing four distinct dock areas and one bulk tanker truck area, the facility layout is designed to minimize handling and movement of containerized waste and maximize the utilization of all process equipment included in the Container Management Unit. The existing facility is designed so that all waste storage, processing and handling activities are conducted within an enclosed building. Tankers are loaded within the bermed area of the warehouse and as such, stormwater contact with waste does not occur. When containers are loaded or off loaded at Dock 1 the sump pump located inside of the warehouse is shut off. Only sealed containers are received at Badger Disposal. In the event of a spill any accumulated liquid will be pumped into drums or toes, sampled and analyzed and shipped off site for disposal.

Dock Number 1

Dock Number 1 on the northwestern corner of the existing storage building includes 2 bays and has approximate dimensions of 25 feet by 20 feet. The dock area itself is contained by trenches to prevent run-on and is constructed of concrete with a future impervious liner. This dock acts as the primary dock for receipt of containers destined for processing. Containers are off-loaded by forklifts, drum carts, or via reversible live bottom conveyors within the box vans. From here the containers are conveyed to the lab pack consolidation building, or to the appropriate area for storage within the storage processing building, or to the appropriate area for process within the storage process building.

Dock Number 2 (Includes proposed addition to existing building)

Dock Number 2 on the southeastern corner of the existing building and northeastern corner of the building addition includes 2 bays and has approximate dimensions of 25 feet by 25 feet. This dock primarily serves to receive drums of solid waste materials to be processed by solids consolidation of the DHS. This dock provides direct access to solids consolidation. Currently, roll-offs are shipped out of this dock by truck. The dock is constructed of concrete, and is designed

to contain any potential spillage inside the building from mixing with any precipitation. Like the other dock areas, this dock is also sloped to prevent run-off and facilitate pumping of any liquids which are accumulated. This dock may be used for outbound shipment of filled roll-offs, incineration feed, and/or inbound receipt of empty roll-offs. This dock may be utilized to transfer lab packs to the lab pack consolidation building.

Dock Number 3

Dock Number 3 on the north side of the lab pack building includes 2 bays and has approximate dimensions of 20 feet by 35 feet. This dock is proposed to primarily serve to load lab pack drums into appropriate staging areas further processed by consolidation. Drum quantities of waste acid and waste caustic for consolidation into the bulk storage tanks and cylinders for redirection to a treatment facility will also be received here. No consolidation or processing activities for cylinders will be conducted at Badger Disposal. The dock will be constructed of lined concrete and designed to contain any precipitation. The dock is sloped to prevent run-off and run-on and facilitate pumping of any liquid which is accumulated. As with Dock Number 1, containers are loaded by forklifts or via reversible live bottom conveyors within the box vans.

2.2.2 Container Processing System (other than lab pack containers)

The container processing system will be designed to accomplish three objectives:

Empty Drums of Solid Materials into a Roll-Off Container for Consolidation

The emptying of the 55 gallon drums of solids into the roll-off container will be and has been accomplished by means of a variable speed hydraulically driven auger. The existing drum solids auger will be modified so as to be completely explosion proof in its electrical characteristics and encapsulated in its own nitrogen blanketing system. The solids will pass through an air lock slide gate before entering the roll-off for consolidation.

Blend Suitable Drums of Solid Materials Into Waste Liquids for the Fuel Blending Operations in up to 2,000 Gallon Batches

The drum auger system is operated according to the manufacturer's instructions. Drums are staged after evaluation for use in fuel blending. If drum contents are to be routed to blend tank BT-1, the gate in the chute at the auger discharge is placed in the position to feed the emptied drum contents into the conveyance system to blend tank BT-1. Slide gate valve SGV-1 is opened, and operation of the auger system is commenced. Drums are emptied by the system into the conveyance system which conveys them to blend tank BT-1. At completion of blend tank loading, the auger system is deactivated and SGV-1 is closed. If the drum contents are evaluated as inappropriate for blending, the gate in the chute is moved to discharge emptied drum contents into the roll-off below the drum auger. Upon completion of drum emptying, the auger is deactivated. The existing drum solids auger will be retrofitted with a transfer system so as to convey individually selected drum contents into the fuel blending tank. The entire drum solids auger will be encapsulated and equipped with an air lock such that the entire drum emptying operation will be conducted under a nitrogen blanket. The ambient air within the air lock will be purged with at least eight volumes of nitrogen after the air lock has been closed. The inner door of the air lock will be opened and the drum emptying sequence will take place. The encapsulation of the drum auger will be equipped with windows for the system operator to view the entire operation, explosion venting with the vents hard piped through the building roof, oval nitrogen blanketing system, piping for the master vapor recovery system, and piping for the fresh air purge for drum removal. The fresh air purge will be supplied by a non-sparking aluminum fan and both the exhausts from the nitrogen and fresh air purge will be directed into the master vapor recovery system.

The transfer system will be totally enclosed and will be connected to the fuel blending system by means of a vapor tight slide gate so as to maintain the nitrogen blanket within the fuel blending system at all times. The transfer system is expected to be a reversing conveyor type system so as to minimize operational problems and provide operator selection as to whether the material augered out of the drum will be transferred to the fuel blending operation or the roll-off for solid waste consolidation. The solids will pass through an air lock slide gate into the blending vessel. During the period that the solids are passing

into the vessel, operation of the nitrogen blanketing system will continue to minimize the oxygen content of the vessel below an expected 6% concentration so as to prevent an explosive condition from occurring at any time within the vessel.

Oxygen concentration, tank level, and mixer motor amperage will be able to be monitored and displayed continuously locally at the blending tank, main operator control panel in the office of the storage building and supervisory control system in the office building of the complex. Motor amperage will be monitored as a function of % of motor capacity so as to indicate that the material has not become so viscous as to prevent transfer to the bulk storage tanks.

In the event that the material has accidentally become too viscous for transfer, return of "thinner" material from the bulk storage tanks to correct the condition will be possible via the bulk tank transfer/loading pumps.

Blend Suitable Liquids in up to 2,000 Gallon Batches from the Various Sized Containers Received at the Facility for the Fuel Blending Operations

The liquids blending operation will also be conducted within the confines of the storage building. Individual drums will be pumped by means of either a conventional fixed, air driven, axial piston, high viscosity, explosion proof drum pump connected to the hard piping feeding the fuel blending station or by means of a fixed pump with flexible suction feeding the fuel blending tank through a separate feed line. The liquids will be continuously mixed to achieve a homogeneous blend in preparation to be pumped out to the bulk storage tank system. The blending tanks contents will be monitored continuously for temperature and level as an additional safety. Temperature, oxygen content, tank level, and mixer motor amperage shall be monitored locally and remotely at the main process/operation control system and the supervisory control system. Upon reaching a high tank level condition, high tank temperature condition, or high mixer motor amperage condition, an alarm will sound to warn the operator and all tank filling systems will be automatically disabled. If a high oxygen condition in the blending tank exists, the tank filling systems will also be disabled so as to determine the cause of the high oxygen concentration before any additional actions are initiated. Resetting of either high tank temperature conditions or high tank oxygen conditions to continue operations will be permitted only at the supervisory controls located within the main office. Resetting of

other alarm conditions will be permitted locally or at the main process operator control system.

Upon achieving a suitable blended condition (i.e., a mixture of fuel that meets the specifications/requirements of the end user) within the blending tank, the operator will be able to initiate a transfer to the bulk storage system.

Upon selection of one of the four bulk storage tanks, the control system will calculate whether or not the selected bulk storage tank has sufficient capacity to accept the full transfer amount in the blending tank and notify the operator accordingly. The operator will then be able to "top off" the selected bulk storage tank while by the transfer pump will be stopped automatically at the bulk storage tank high level. The operator must then select a different bulk storage tank and repeat the process. If the control system allows transfer of the entire (or balance of) the blending tank contents, the pump will continue to pump until the blending tank reaches a preset low level or the presence detector on the suction side of the 100% capacity transfer pump signals an empty pipe condition. Badger Disposal intends to maintain a minimum liquid level in the blending tank at all times so as to be able to blend solids from the drum auger at any time.

The agitator for the blend tank (AG-5) is controlled by explosion-proof push button actuation at the tank. Motor starter is interlocked with timer to operate agitator for ten minutes before automatically requiring the operator to reactivate if further blending is required.

The blending tank contents will be conveyed to the bulk storage tanks via a steel "pipe in a pipe" system complete with interstitial leak detection, via an overhead pipe rack support system. The entire process within the blending tank will be monitored and maintained under an inert nitrogen gas atmosphere. The fuel blending tank will be constructed of carbon steel and will be equipped with pressure vacuum relief valves, emergency vents, pressure regulations, metal seated fire rated valves and flame arresters. The blending tank will also be connected to the vapor recovery system which will be described later.

2.2.3 Bulk Storage Tanks

All four 12,000 gallon tanks are constructed of carbon steel and are equipped with pressure vacuum relief valves, pressure regulators and vents, metal seated fire rated valves, and flame arresters. The tanks are situated within a lined and coated concrete containment area which is canopied to prevent precipitation run-on and provides containment for approximately 20,760 gallons in accordance with WAC NR 645.09. Emissions from all tanks and process chambers are collected by a manifold pipe and conveyed to the vapor recovery system (VRS). All transfer piping is totally contained by encasement or routed in a contained overhead trough system with leak detection capabilities.

Computer Control System

Microprocessor based programmable logic controllers (PLC) will be used to monitor and control the entire process. Some of the specific parameters monitored include: O2 concentration, high tank levels, low tank levels, pressure, temperature, nitrogen pressure, hydraulic system conditions, and feed rates. Safety parameters included in the system and integrated into the control systems prevent the DHS from operating if any of the parameters monitored by the computer control system are exceeded or otherwise outside of established limits.

Vapor Recovery System (VRS)

The main process controls are also used to control the VSR which processes all of the non-fugitive vapors from the DHS in addition to other sources at the complex. The VSR employs atomized liquid nitrogen to condense incoming process vapors in condensing chambers. The flow of nitrogen to the atomizers within the initial condensing chamber is controlled to automatically regulate and respond to the inflow of vapors from the fuel blending and bulk storage and to maintain condensing temperatures within an established range, typically between minus 60 degrees and minus 100 degrees Fahrenheit. Condensed vapor will be returned to one of the bulk storage tanks. Vapor exiting the vapor recovery system will be routed through a vapor phase activated carbon absorption system before discharge to the atmosphere. The system is capable of providing control to other potential air pollution sources from the facility as may be required. The VSR will be located

adjacent to the liquid nitrogen supply tank near the west edge of the Bulk Storage Tank Farm.

2.2.4 Storage/Process Building

The storage/process building is shown on the drawings. This building is designed to provide environmentally safe storage for all containerized materials and processing equipment. The building is designed with 12" thick outer walls, reinforced concrete floors, and meets the aisle spacing requirements of the State Fire Marshall.

Explosion proof electrical equipment will be used throughout the process and storage areas. An automatic aqueous film forming foam (AFFF) fire suppression system is included in the building storage and process areas. Additional emergency equipment is located throughout the building including hand-held fire extinguishers, fire blankets, and absorbent booms. The storage/process building is designed with concrete curbing at entrances to the building to minimize the risk of any accidental spillage leaving the confines of the building. The curbing, walls and floors of the building are designed to meet the requirements of WAC NR 640.13, and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage areas of the storage/process building.

The storage/process building provides containment capacity of over 9,192 gallons of liquid materials in accordance with WAC NR 640.13 in the existing building. 4 inch high containment ramps have been installed An additional 7,000 gallons of containment capacity will be available upon the installation of the storage building addition. Run-on is not a concern within the building in that it is entirely enclosed. The storage/process building is designed and operated so that leaked or spilled material within any area can be easily identified and cleaned up to prevent contact with other containers. Pallets are used in specified areas to prevent containers from contact with standing water or potential leaks from surrounding containers. Overpacks or empty drums are kept on-site so that leaking materials can be transferred and easily contained. In addition, sand and other absorbent products are kept in sufficient quantities to contain and remove any localized spillage. Any absorbent materials used are handled in accordance with appropriate regulations and recycled on-site or manifested off-site. The dimensions of the various areas within the storage/process building are shown on the drawing.

Automatic fire doors as shown on drawing #05490-EE1 located in Section 7, attachment B of this submittal were installed June 3, 1996. They are located within the building to isolate various areas in the event of a fire. One fire door is located on the east side of the firewall the other is on the west side of the firewall. These doors operate on a fusible link. If excessive heat is detected, the doors automatically close, isolating the process/storage portions of the building from the laboratory or office area.

Regulated hazardous waste typically stored within the storage/process building can be received at the complex in an assortment of containers. By far, the most common container expected will be the 55-gallon steel drum. Sheets 9, 10 and 11 of 18 in Appendix Q depict the typical locations of containers within the storage/process building. Sheets 9, 10 and 11 also depict specific areas where incompatible materials are stored to ensure proper isolation.

2.2.5 Drum Pumping Stations

These stations are set up periodically to pump containerized material into the fuel blending tank. The system provides for grounding of the containers and equipment during operation. Air motor or explosion-proof electric motor driven drum pumps within the curbed area containing the fuel blending tank will be utilized to transfer "water-like" low viscosity liquids into the fuel blending tank. The piping will consist of flexible hose attached directly to the drum pump within the containment area. The flexible hose will be connected to schedule 40 steel pipe for the remaining 5-to-10 feet distance to the fuel blending tank.

2.2.6 Sequence of Container Handling Activities

1. Containers are received at one of the container loading/unloading docks.

2. After sorting, inspections are conducted, or acquired composite samples are analyzed for relevant parameters in accordance with the Waste Analysis Plan, if necessary.

3. Compatible waste streams are then conveyed to one of the processes within the Container Management Unit or a designated area within the storage/process building for storage.

4. All containers are emptied to comply with WAC NR 605.06(3). Compacted containers are conveyed to a roll-off container and shipped off-site for recycling as scrap steel. Empty containers from drum pumping stations, or the lab pack operations system may be crushed, and recycled as a usable scrap steel or shipped intact off-site to a drum reconditioner.

2.3 Tank Management Unit

Sheet 12 of 18 in Appendix P illustrates the future tank systems which are proposed to be located at the Badger Disposal complex. The areas included in the Tank Management Unit are: all tanks for storage of fuel blending, and fuel product storage tanks, solids blending area, and all associated piping and containments. In addition, these tanks, piping, layouts and loading/unloading areas are included in appropriate drawings. All tanks and piping used by Badger Disposal are located above ground, and tanks are ultrasonically tested annually to ensure each tank's structural integrity. All tanks used for blending, inbound storage and product storage are constructed of carbon steel. All tanks are grounded and painted to further reduce the potential for corrosion. The pH of the materials in each tank is determined as necessary. Materials used for construction of the tank systems are compatible with the materials accepted at the Badger Disposal complex. Inspection of all tanks at the Badger Disposal complex will be carried out in accordance with 40 CFR 264.15 and includes tanks, containments, and ancillary equipment. A copy of the inspection log is outlined in detail in the Inspection Section of this application. Badger Disposal will inspect all the tank systems daily to detect corrosion or the release of waste, as well as areas immediately surrounding the externally accessible portion of the tank system, including secondary containment, to detect corrosion or signs of release of hazardous wastes (i.e. wet spots). Notations of the observations made will be recorded along with the date, time, and name of the inspector. Any deficiencies identified during the inspection will be so noted in the inspection log along with the date and nature of the corrective action taken.

A tank farm inventory will be taken daily and analysis performed on each tank, as required.

2.3.1 Bulk Liquid Loading/Unloading Areas

The Badger Disposal complex is proposed to include one loading/unloading area for receiving and shipping bulk liquid waste feed stocks, liquid hazardous waste fuels, bulk acid waste and bulk caustic waste. The loading/unloading pad for receipt and shipment of waste related materials can accommodate up to 2 bulk tankers although only one tanker is expected to be serviced at any given time.

All loading/unloading areas at the Badger Disposal complex will be designed with reinforced concrete pads containment ramps integral curbing to prevent run-off and to contain any accidental release which may occur during any loading/unloading operations. Each loading/unloading area is sufficiently impervious to prevent leakage to the surroundings. The bulk tanker loading/unloading area will also be covered by a canopy to minimize any potential run-on from precipitation events.

The Loading/Unloading pad will include a collection sump. Additionally, any pumps used for loading/unloading operations will be located within the containment area, or will be provided with individual secondary containment. The Loading/Unloading pad includes a double sloped lined concrete pad with a center collection sump and trench. All piping and ancillary equipment, including filters, are included within the concrete containment.

Explosion-proof pumps are used for transferring materials from bulk tankers. Bottom unloading of bulk tankers is normally utilized to minimize the threat of fire or explosion, and to facilitate the use of vapor balance system. The vapor balance system associated with the Loading/Unloading Pad is employed for control of vapors from bulk loading/unloading activities for fuel and is described later in the tank farm discussion. A static grounding system is also utilized within all areas to minimize the threat of fire. Top loading of the bulk tankers will be utilized to minimize any potential spillage that may occur. Waste acid and waste caustic loading and unloading will be accomplished by separate designated service pumps. Vapors from loading/unloading procedures of waste acid and caustic waste will be routed to the alkaline oxidation scrubber. Any spillage occurring on the loading/unloading pad will be handled by designated service portable pumps and the spillage will be directed to the appropriate bulk storage tank (fuels, acid or caustic).

Any materials or precipitation which accumulates on the pads are removed using portable pumps or an available vacuum truck. Collected run-on materials from these areas will be blended in with the liquid fuels program. Should other methods be considered for disposition of any run-on materials in the future, analysis will be performed as required. Emergency equipment will be located in the area of the loading/unloading pad. Future provision will allow for fire pull stations in the vicinity of the loading/unloading operations to further enhance the fire communications system.

2.3.2 Tank Farms

The Tank Farm is depicted in drawings enclosed and includes tanks 1-4. Tanks 1-4 are typically used for blended fuel storage while the process tank will be typically used for blending. All tanks are designed in accordance with appropriate codes and regulations to safely store and blend ignitable materials. Each individual tank includes a external fire valve operated by a fusible link and pressure/vacuum relief valve to minimize the potential for flame propagation. All tanks are also provided with agitators for blending of fuel products.

AGITATORS:

AG-1: Agitator for Storage Tank ST-1. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

AG-2: Agitator for Storage Tank ST-2. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

AG-3: Agitator for Storage Tank ST-3. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

AG-4: Agitator for Storage Tank ST-4. Agitator is controlled by explosion-proof push button actuation at the tank. Agitator operates continuously while product is in the tank. Agitator is manually deactivated by the push button when the tank is not in use or as management dictates.

A high level alarm is integrated with an automatic cut-off system for the feed pumps, thereby providing additional overfill protection. The automatic pump cut-off system operates using non contact ultrasonic level sensors which, when detecting a high liquid level, open a fail safe contact which interrupts power to the feed pumps, thus preventing any further conveyance of materials into the tank.

The vapor balance system vents each tank to a manifold. As material is transferred, the vapors displaced from the filling operation are vented to the manifold and are conveyed through a flex connection to the off-loading tanker or tank, depending on the sequence.

All tanks are located within an impervious containment system meeting the design requirements of WAC NR 645.09.

The acid and caustic bulk storage tanks will be constructed of lined carbon steel and equipped with continuous readout non-contact ultrasonic level controls in a manner similar to the blended fuel storage tanks.

The vapors from each of these atmosphere tanks will be directed separately into the alkaline oxidative scrubber system utilized to service the lab pack bays as well. Both the bulk waste acid and bulk waste caustic tanks will be equipped with an individual appropriate lined reinforced concrete secondary containment of 6,700 gallon capacity (15.5' x 15.5' x 4') including that portion of the tank below the height of the containment area. Each of the tanks will be accessed at the top by means of a caged ladder.

2.3.3 Piping and Yard Area Associated Equipment

Piping and associated equipment at the Badger Disposal complex is located above ground and provided with secondary containment, as appropriate. Yard (overhead transfer) piping is situated in a secondary containment piping system equipped with integral leak detection. If a pipe, flange or valve leaks, it would be easily identified and be completely contained,

avoiding any risk to the environment while repairs are undertaken. Additionally, as part of the 40 CFR 264 Subpart BB mandated monitoring program, this ancillary equipment (flanges, valves, pumps, etc.) will be regularly monitored and inspected for leaks, further reducing the threat of releases from defective equipment.

Flex hosing will be used in bulk loading/unloading areas. Hard plumbing is provided elsewhere throughout the complex.

Badger Disposal will pave the non-operational yard area of the plant with concrete in accordance with the paving plan submitted.

2.3.4 Sequence of Bulk Handling Activities

1. Bulk tankers entering the Badger Disposal complex are directed to a sampling and staging area. The manifest is inspected, contents of the tankers sampled, and sample analysis performed in accordance with the Waste Analysis Plan prior to the tanker being unloaded.

2. After analysis is complete and approved, the driver is directed to the unloading area.

3. At the unloading area, operations personnel connect discharge hoses and the vapor balance hose to the tanker and unload the tanker to the assigned storage or blending tank.

FEED SYSTEM SAFETY CONTROLS & LEAK DETECTION

UNLOADING TANKER TO STORAGE TANKS:

This operation is controlled from a Control Panel, CP-1, located at the pumping station. Product hose and vapor return hose are connected to tanker.

The operation of Unloading to S.T. is selected. Pump P-4 or P-5 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-1 and GV-12 are left in closed position. GV-2, GV-35, and GV-13 are opened. System is activated by push button.

Upon activation, free capacity of selected storage tank is calculated based on level reading from ultrasonic level detector, L1. If free capacity is less than 5,000 gallons, check capacity alarm light is activated on control panel. If this circumstance is acceptable to the operator, operator pushes acknowledge button and system is activated. Otherwise, a different tank selection is made.

Upon activation, ABV-1 remains in the closed position, three-way solenoid S-6 opens, allowing air onto the cylinder of ABV-2, thereby opening ABV-2. Tank fill valve ABV-7, ABV-8, ABV-9, or ABV-10 and tank vent valve ABV-12, ABV-13, ABV-14, or ABV-15 are similarly opened, depending on the tank selected for filling. ABV-17 is also similarly opened. As tank fills, vapors are vented back to the tanker.

If the level in the selected tank reaches the high level position setting for L1, the system is deactivated with all three-way solenoids venting and actuated valves thereby returning to closed position. An alarm light is activated at the control panel. Alarm is deactivated upon acknowledgment by the operator. At this point, a different storage tank is selected as outlined above and the system is activated again.

Upon completion of pumping out the tanker, the pump P-4 or P-5 is allowed to empty the suction lines. The system is deactivated by push button at the control panel CP-1, allowing the three-way solenoid valves on the actuated valves to vent, thereby closing the actuated ball valves.

GV-2, GV-35, and GV-13 are closed, and product and vapor hoses are disconnected.

The system is limited to 30 minutes of continuous operation. If the system operates for 25 minutes continuously, an alarm light is activated requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.

TRANSFERRING FROM STORAGE TANK TO BLEND TANK BT-1

This operation is controlled from control panel CP-1 located at the pumping stations.

The operation of Transfer from S.T. to B.T. is selected. Pump P-4 or P-5 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-2, GV-35, and TV-13 are left in closed position. GV-1 and GV-12 are opened. System is activated by push button.

Upon activation, ABV-2 remains in the closed position; three-way solenoid S-5 opens, allowing air onto the cylinder of ABV-1, thereby opening ABV-1. Tank discharge valve ABV-3, ABV-4, ABV-5, or ABV-6 is similarly opened, depending on the tank selected for transferring. Tank vent valve ABV-12, ABV-13, ABV-14, or ABV-15 are similarly opened depending on the tank selected. Blend tank vent valve ABV-16 is similarly opened. As blend tank fills, vapors are vented back to the appropriate storage tank.

If the level in the blend tank reaches the high level position setting for L1, the system is deactivated with all three-way solenoids venting and actuated valves thereby returning to closed position. An alarm light is activated at the control panel. Alarm is deactivated upon acknowledgment by the operator.

Upon completion of transferring from the selected storage tank to the blend tank, the system is deactivated. All actuated valves are closed and all gate valves are closed.

The system is limited to 30 minutes of continuous operation. If the system operates for 25 minutes continuously, an alarm sounds requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.

TRANSFERRING FROM BLEND TANK BT-1 TO STORAGE TANK

This operation is controlled from a control panel, CP-2, located at the blend tank pumping station.

The operation of Transfer from B.T. to S.T. is selected. Pump P-2 or P-3 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-21 is left in closed position. System is activated by push button.

Upon activation, free capacity of selected storage tank is calculated based on level reading from ultrasonic level detector, L1, in that storage tank. The amount to be pumped from blend tank is calculated based on level reading from L1 in blend tank. If free capacity in the selected storage tank is less than the amount to be pumped from the blend tank, check capacity alarm light is activated on control panel. If this circumstance is acceptable to the operator, operator pushes acknowledge button and system is activated. Otherwise, a different storage tank selection is made.

Upon activation, three-way solenoid S-18 opens, allowing air onto the cylinder of ABV-11, thereby opening ABV-11. Storage tank inlet valve ABV-7, ABV-8, ABV-9, or ABV-10 is similarly opened, depending on the storage tank selected for transferring. Blend tank vent valve ABV-16 and storage tank vent valve ABV-12, ABV-13, ABV-14, or ABV-15 are similarly opened. As storage tank is filled, vapors are vented back to blend tank.

If the level in the selected storage tank reaches the high level position setting for L1, the system is deactivated with all three-way solenoid venting and actuating valves thereby returning to closed position. An alarm light is activated at the control panel. Alarm is deactivated upon acknowledgment by the operator.

Upon completion of pumping out the blend tank, the pump P-2 or P-3 is allowed to empty the suction lines. The system is deactivated by push button at the control panel CP-2, allowing the three-way solenoid valves on the actuated valves to vent thereby closing the actuated ball valves.

The system is limited to 30 minutes of continuous operation. If the system operates for 25 minutes continuously, an alarm light is activated, requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.

TRANSFERRING FROM STORAGE TANK TO TANKER

This operation is controlled from a control panel, CP-1, located at the pumping station.

The operation of Transfer from S.T. to Tanker is selected. Pump P-4 or P-5 is selected. Manual valving is checked for consistency with pump selection. Storage Tank ST-1, ST-2, ST-3, or ST-4 is selected. GV-2, GV-12, and GV-35 are left in closed position. GV-1 and GV-13 are opened. System is activated by push button.

Upon activation, three-way solenoid to storage tank discharge actuated valve ABV-3, ABV-4, ABV-5, or ABV-6 opens, allowing air onto the cylinder of the corresponding valve, thereby opening that valve. Storage tank nitrogen solenoid valve S-12, S-13, S-14, or S-15, depending on the tank selected, is also opened to replace the pumped volume with nitrogen.

Tanker level is monitored by the operator and the system is deactivated at the appropriate time. GV-1 and GV-13 are closed and the product hose is disconnected.

The system is limited to 25 minutes of continuous operation. If the system operates for 20 minutes continuously, an alarm sounds requiring acknowledgment from the operator. Once acknowledged, the system will operate for another cycle.

Initial site preparations including Runoff Prevention Design, Containment Structures, Precipitation Management and Pavement Plan are located in Appendix H, Section 9.

Section 3
DESCRIPTION OF DAILY OPERATIONS
NR 640.06(2)(d)(3)/NR 645.06(2)(d)(3)

3.1 Waste Types Accepted and Excluded

Badger Disposal accepts the waste codes listed in the Part A Application located in Appendix A. No wastes are excluded from acceptance at Badger Disposal. The purpose of both the existing and proposed facility is to conduct exempt recycling of hazardous waste materials, including combustible waste, laboratory waste, waste oil, paint waste, solvent waste and other organic and inorganic materials. The activities conducted at the facility are based on a very simple concept – the re-direction of materials form the waste stream for the purpose of beneficial reuse whenever possible. Organic materials make up the majority of the materials accepted at Badger Disposal. Badger Disposal will also accept corrosive and other hazardous and non-hazardous materials at their facility. Both liquid and solid materials are processed at this location. The facility will also accept laboratory chemicals (labpacks) for repackaging and/or bulking to allow for the cost effective redirection of these materials for the purpose of beneficial use where possible.

3.2 Typical Waste Handling Techniques

Badger Disposal's operations consist of various processes for recovering, re-packing, reclaiming, and/or recycling organic materials generated by a wide variety of industries located throughout the United States. The existing Badger Disposal facility includes one process/storage building. The proposed Badger Disposal facility includes three buildings and bulk tankage for storing of the blended fuels, waste acid and waste caustic.

Badger Disposal receives waste materials either in bulk form or in containers, the most common container being a 55 gallon drum. The characteristics of the material received determines the waste management unit in which the material will be first processed and the unloading area for which it will be designated. An overall flow diagram for the fuels program is included as Figure 1.

All bulk liquid materials after being analyzed are directed to the on-site bulk unloading area where these materials can be pumped or otherwise conveyed to bulk storage tanks or a processing unit within the Tank Management Unit. Bulk solids may be conveyed directly to the Drum Handling

System (DHS). Containerized materials, after inspection and/or random sampling as outlined in the Waste Analysis Plan, are sorted based on the material classification, whether it will be recovered as fuel, incinerator feedstock, or as a solvent, and staged until directed to one of the process areas within the Container Management Unit. Badger Disposal intends to operate a number of processes at the complex which is designed to maximize the percentage of waste materials which can be recovered, reclaimed, or reused. With the proposed processing capability, the recovery efficiency could be upwards of 99.9% of those materials destined for Badger Disposal's fuel program. The normal disposition of any materials which Badger Disposal will be incapable of processing into fuels is expected to be incineration. Any hazardous waste sent off-site will be manifested and include a Land Ban certificate as required by applicable regulations.

Container and Tank Management operational procedures are located in Section 2 of this Appendix.

3.3 Hours of Operation

Badger Disposal currently operates 10 hours per day, 7:00 a.m. to 5:00 pm , weekdays only.

3.4 Traffic Routing

Traffic information is located in Section 3, 3.1.6 of this submittal. Sheet 8 of 18 in Appendix P shows the principle traffic patterns for the facility.

3.5 Drainage and Erosion Control

Drainage and erosion control are located in Appendix H, Section 9 of this submittal.

3.6 Adverse Weather Operations

Because Badger Disposal's tank farm and loading/unloading pad is located outdoors, Badger Disposal has designed a canopy to cover these areas. In the unlikely event that excess amounts of water or snow accumulates in the outside storage areas, Badger Disposal will remove any excess accumulation from the containment systems via portable pumps. Badger Disposal will then manage the accumulated precipitation.

Any employee working outdoors will have proper protective clothing and equipment. All walkways, staging areas will be cleared of snow as early as the weather permits.

The following procedures will be implemented in the event of sever weather conditions:

- Any receiving vessels containing hazardous wastes will be closed and secured.
- Any pumps transferring waste will be shut off and secured.
- All valves, hoses and connections will be closed and secured.
- All personnel are to seek shelter.

3.7 Fire Protection Equipment

The existing Badger Disposal warehouse building is equipped with an AFFF fire suppression system. Table 6 of the Contingency Plan located in Appendix I provides a list of emergency equipment along with a list of places where it can be found at the facility. Appendix P, Sheets 16, 17 and 18 of 18 show the location of safety and emergency equipment which is used by facility personnel.

3.8 Manpower

Badger Disposal currently employs one Approvals Coordinator, one General Manager, one Plant Manager, three Warehouse Technicians, one Receptionist/Computer Operator and one Laboratory Chemist. Job descriptions for each of these personnel are located in Appendix F, Section 3.

3.9 Methods for Handling Incompatible Wastes

Necessary precautions will be taken by Badger Disposal to mitigate any reactions that generate or produce heat or pressure, fire or explosion, threaten human health or the environment or pose a risk of damaging the structural integrity of the equipment or the facility. Some of these precautions include an extensive prequalification process, personnel training, fire suppression systems, and segregation of incompatible wastes. Incompatible waste storage areas will contain individual secondary containment systems to ensure mitigation of reactions if a container containing compatible wastes leaks or ruptures. Only compatible materials will be stored together. Any containers that contain known incompatible wastes will not be used for placement of additional wastes.

3.10 Daily Cleanup

Operation and maintenance activities will consist of a daily logged inspection of all diked areas, drum storage areas, drum processing areas within the lab pack building , the drum storage/fuel blending building, as well as inspections of the secondary containment areas for all bulk storage tanks (blended fuel, waste acid, waste caustic) for evidence of any leaks that have occurred, damaged drums, damage tanks, spillage, integrity of the individual containment, accumulated precipitation and general housekeeping. The Plant Manager is responsible for all facility inspections.

3.11 Recordkeeping

Badger Disposal uses various operating records and logs at the facility. This information is recorded as it becomes available and is retained at the complex until ultimate closure, or for a period of not less than three years, or as otherwise required in accordance with appropriate Federal or State regulations. These report forms are located in Appendix E of this submittal.

Inventory Forms

The inventory forms identify the type of wastes received, quantity of waste, dates of receipt, the generator of the waste, the hauler of the waste, etc.

Tank Farm Reports

Tank farm reports are compiled every day of operation and shows each inbound bulk shipment, its analysis, and location where the material was unloaded. Blending and outbound shipments are also recorded on this form.

Incident Reports

Incident reports which document any implementation of the Contingency Plan will be retained as necessary. This report will also be submitted to the Wisconsin Department of Natural Resources (WDNR) and the Environmental Protection Agency (EPA) Regional Administrator within 15 days of an occurrence as required by NR 630.22(2)9(c) and 40 CFR 264.56(j). The information on the Incident Report includes the following:

- Name and telephone number of reporter;
- Name, address, and telephone number of the facility;
- Date, time, and type of the incident;
- Name and quantity of materials involved, to the extent known;
- The extent of injuries known;
- The potential hazards to human health or the environment outside of the facility, when applicable;
- Estimated quantity and disposition of material(s) removed which resulted from the incident; and
- Other information deemed necessary at the time the report is prepared.

Inspection Logs

Inspection Logs are used to identify and record discrepancies found on any pieces of critical equipment within the Badger Disposal facility for which failure could lead to the endangerment of public health or to the surrounding environment. These records include the date and time of the inspection, the name of the inspector, and a notation of the observations made. When a deficiency is detected, it is recorded on the Inspection Log, and a Maintenance Request form is initiated. The maintenance request form along with the date and nature of any repairs or other remedial actions taken to correct the cited deficiency are included in the operating record. The inspection log, together with any associated maintenance request forms, are kept on file at the Badger Disposal facility for a minimum of three years.

Maintenance Request Forms

Maintenance Request Forms are completed when, through inspection, a deficiency is identified which requires repair or attention by the maintenance department. A copy of the maintenance request form is forwarded to the maintenance supervisor for scheduling of repairs. When this work is completed, the maintenance supervisor signs the maintenance request form indicating completion of the required repairs. The signed maintenance request form is then placed with Badger Disposal's Operating Log.

Monitoring, Testing, and Analytical Data

Monitoring, testing, and analytical data for tank testing will be maintained at the Badger Disposal facility.

Closure Costs

Badger Disposal maintains a copy of the latest closure cost estimates for the facility in accordance with NR 685.07(2) and 40 CFR 264.142. A copy of the latest cost estimate is included with the Closure Plan, Appendix J, of this application.

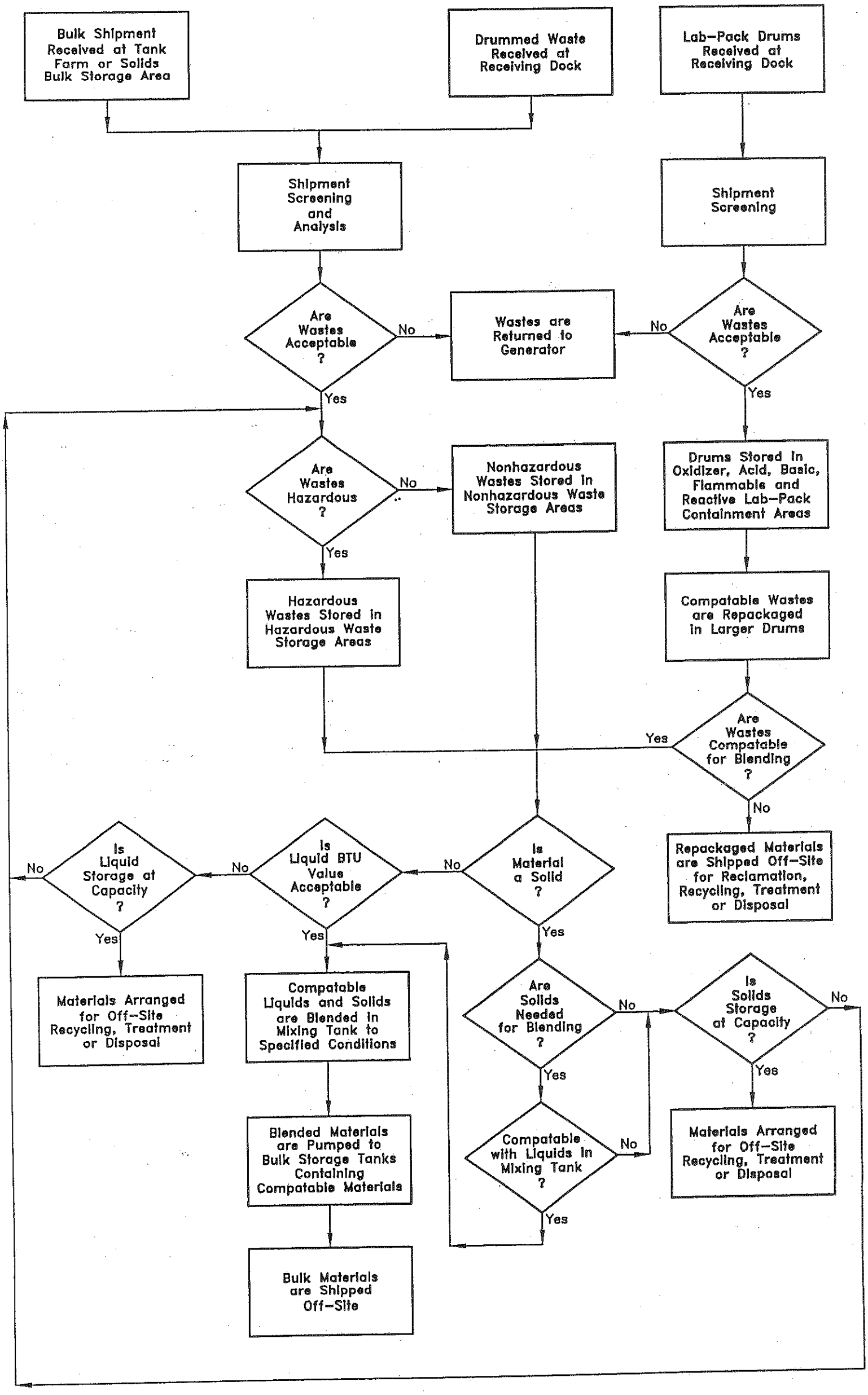
3.12 Monitoring Equipment

Microprocessor based programmable logic controllers (PLC) will be used to monitor and control the entire process. Some of the specific parameters monitored include: O2 concentration, high tank levels, low tank levels, pressure, temperature, nitrogen pressure, hydraulic system conditions and feed rates. Safety parameters included in the system and integrated into the control systems prevent the DHS from operating if any of the parameter monitored by the computer control system are exceeded or otherwise outside of established limits.

The main process controls are also used to control the Vapor Recovery System (VSR) which processes all of the non-fugitive vapors from the DHS in addition to other sources at the complex. The VSR employs atomized liquid nitrogen to condense incoming process vapors in condensing chambers. The flow of nitrogen to the atomizers within the initial condensing chamber is controlled to automatically regulate and respond to the inflow of vapors from the fuel blending and bulk storage and to maintain condensing temperatures within an established range, typically between minus 60 degrees and minus 100 degrees Fahrenheit. Condensed vapor will be returned to one of the bulk storage tanks. Vapor exiting the vapor recovery system will be routed through a vapor phase activated carbon absorption system before discharge to the atmosphere. The system is capable of providing control to other potential air pollution sources from the facility as may be required. The VSR will be located adjacent to the liquid nitrogen supply tank near the west edge of the Bulk Storage Tank Farm.

3.13 Emergency Equipment and Contacts

Emergency equipment and emergency contacts, including telephone numbers are provided in the Contingency Plan, Appendix I of this submittal.

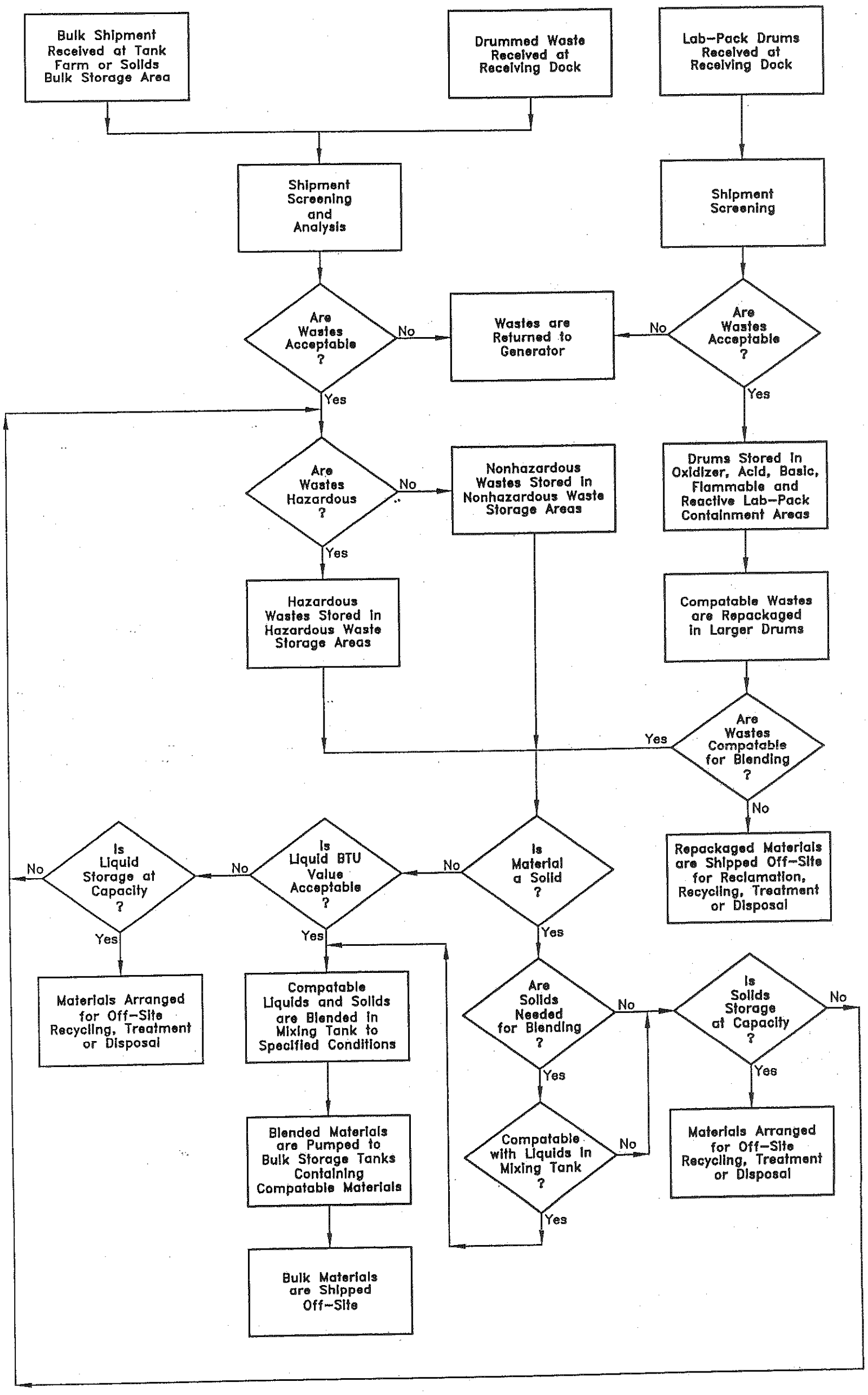


MATERIAL FLOW DIAGRAM

MILWAUKEE, WISCONSIN

RMT INC.

DWN. BY:	DKJ
APPROVED BY:	
DATE:	JUNE 1994
PROJ. #	3057.01
FILE #	30570111



MATERIAL FLOW DIAGRAM

MILWAUKEE, WISCONSIN

RMT INC.

DWN. BY:	DKJ
APPROVED BY:	
DATE:	JUNE 1994
PROJ. #	3057.01
FILE #	30570111

APPENDIX L

APPENDIX L

LOCAL PLAN APPROVALS

State of Wisconsin
Waste Facility Siting Board
5005 University Avenue, Suite 201, Madison, WI 53705-5400
Phone: (608) 266-7709
Fax: (608) 264-9885
e-mail: dha.mail@dha.state.wi.us

Michael A. Marsden
Chairman

David H. Schwarz
Executive Director

CERTIFIED MAIL

October 5, 2005

Kandylee Schmit
Compliance Officer
Badger Disposal of WI, Inc.
5611 W. Hemlock St.
Milwaukee, WI 53233

Mark Ryan, Clerk
Milwaukee County
901 North 9th St, Rm 105
Milwaukee, WI 53233

Ron Leonhardt, Clerk
City of Milwaukee
200 E. Wells St, Rm 205
Milwaukee, WI 53202

Re: Badger Disposal of WI, Inc.'s Proposed Renewal of Hazardous Waste Storage Facility Operating License, City of Milwaukee, Milwaukee County

Dear Ms. Schmit, Mr. Ryan, and Mr. Leonhardt:

On July 25, 2005, the Waste Facility Siting Board received copies of written requests for local approvals sent by Badger Disposal of WI, Inc. to the City of Milwaukee and Milwaukee County. This request was received by the affected municipalities on July 14, 2005.

The law allows an affected municipality to participate in the negotiation process if the governing body adopts a siting resolution and appoints members to the local committee within 60 days after the municipality receives written requests by the applicant. sec. 289.33(6)(a), Wis. Stats.

In this case, neither the City of Milwaukee nor Milwaukee County took the action required to participate in the negotiation and arbitration process.

As a result, the Waste Facility Siting Board considers this case closed and Badger Disposal of WI, Inc. may continue to seek state approval of its hazardous waste storage facility and is not required to negotiate or arbitrate under sec. 289.33, Wis. Stats.

If you have any questions, please contact me.

Sincerely,

David H. Schwarz

DHS/jaf

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COUNTY CLERK

Milwaukee County

MARK RYAN • County Clerk

July 14, 2005

Mr. Henry J. Krier, President
Badger Disposal of WI., Inc.
5611 W. Hemlock St.
Milwaukee, WI 53223

Dear Mr. Krier:

Thank you for your letter of July 13, 2005 wherein you seek local approval for the renewal of your hazardous waste operating license.

In accordance with s.289.22(1m), Wis. Stats. and at the direction of the Milwaukee County Board of Supervisors {File No. 85-21(a)(b)}, I wish to inform you that there is no applicable county approval required.

Sincerely,

MARK RYAN
County Clerk

jas

cc County Executive Scott Walker
County Board Chairman Lee Holloway
Emergency Management

State of Wisconsin
Waste Facility Siting Board
5005 University Avenue, Suite 201, Madison, WI 53705-5400
Phone: (608) 266-7709
Fax: (608) 264-9885
e-mail: dha.mail@dha.state.wi.us

Michael A. Marsden
Chairman

David H. Schwarz
Executive Director

July 27, 2005

Kandylee Schmit
Compliance Officer
Badger Disposal of WI, Inc.
5611 W. Hemlock St.
Milwaukee, WI 53233

Re: Badger Disposal of WI, Inc.'s Proposed Renewal of Hazardous Waste Storage Facility Operating License, City of Milwaukee, Milwaukee County

Dear Ms. Schmit:

This letter acknowledges receipt of copies of written requests for local approvals sent to two municipalities affected by the proposed renewal of the Badger Disposal of WI, Inc.'s Waste Storage Facility Operating License.

Return mail receipts show the City of Milwaukee and Milwaukee County received this written request on July 14, 2005, and therefore will have 60 days to adopt a siting resolution and appoint members to a local committee. sec. 289.33(6)(a), Wis. Stats.

Please call if you have questions.

Sincerely,

David H. Schwarz

DHS/jaf
c: Mark Ryan, Clerk, Milwaukee County
Ron Leonhardt, Clerk, City of Milwaukee

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BADGER DISPOSAL
Badger Disposal of WI, Inc.

July 22, 2005

Mr. David H. Schwarz
Executive Director
State of Wisconsin Waste Facility Siting Board
5005 University Avenue, Suite 201
Madison, WI 53705-5400

Dear Mr. Schwarz,

Enclosed please find copies of written requests for local approvals that were sent by Badger Disposal of WI., Inc. to the Milwaukee County Clerk and City of Milwaukee Clerk. Also enclosed are copies of the signed Certified Mail receipts.

Please let me know if you require any additional information from us to conform with siting requirements. I can be contacted at 866-271-0961.

Sincerely,
Badger Disposal of WI., Inc.

Kandylee Schmit
Compliance Officer

5611 W. Hemlock St. Milwaukee, WI 53223
866-271-0961 • 414-760-9175 • Fax: 414-760-9189 • www.badgerdisposal.com

BADGER DISPOSAL
Badger Disposal of WI, Inc.

CERTIFIED MAIL

July 13, 2005

Mr. Mark Ryan
Milwaukee County Clerk
901 N. 9th Street, Room 105
Milwaukee, WI 53233

RE: Local Approval for Renewal of Hazardous Waste Storage Facility Operating License
Badger Disposal of WI., Inc.
5611 W. Hemlock Street
Milwaukee, WI 53223

Dear Mr. Ryan,

Badger Disposal of WI., Inc. operates a hazardous waste container storage facility located at 5611 West Hemlock Street, Milwaukee, Wisconsin. The Wisconsin Department of Natural Resources issued Badger Disposal an initial hazardous waste operating license on December 16, 1996. This license expires on December 16, 2006. Badger Disposal of WI. Inc. intends to apply for renewal of their hazardous waste operating license.

The Badger facility is located within the Southwest one-quarter(1/4) of Section Fourteen (14), in Township Eight (8) North, Range Twenty-one (21) East, in the City of Milwaukee, Milwaukee County, Wisconsin. Enclosed please find a map showing the location of the facility.

The purpose of this letter is to determine if there are any new or additional requirements that apply to the Badger Facility, and to receive confirmation that Badger is complying with any local requirements. Assuming we are complying with all local requirements, Badger is hereby requesting a waiver from local approval. This is our initial written request for local approvals. A copy of the Standard Notice which outlines the time limits and requirements for municipalities to participate in the negotiation and arbitration process is attached.

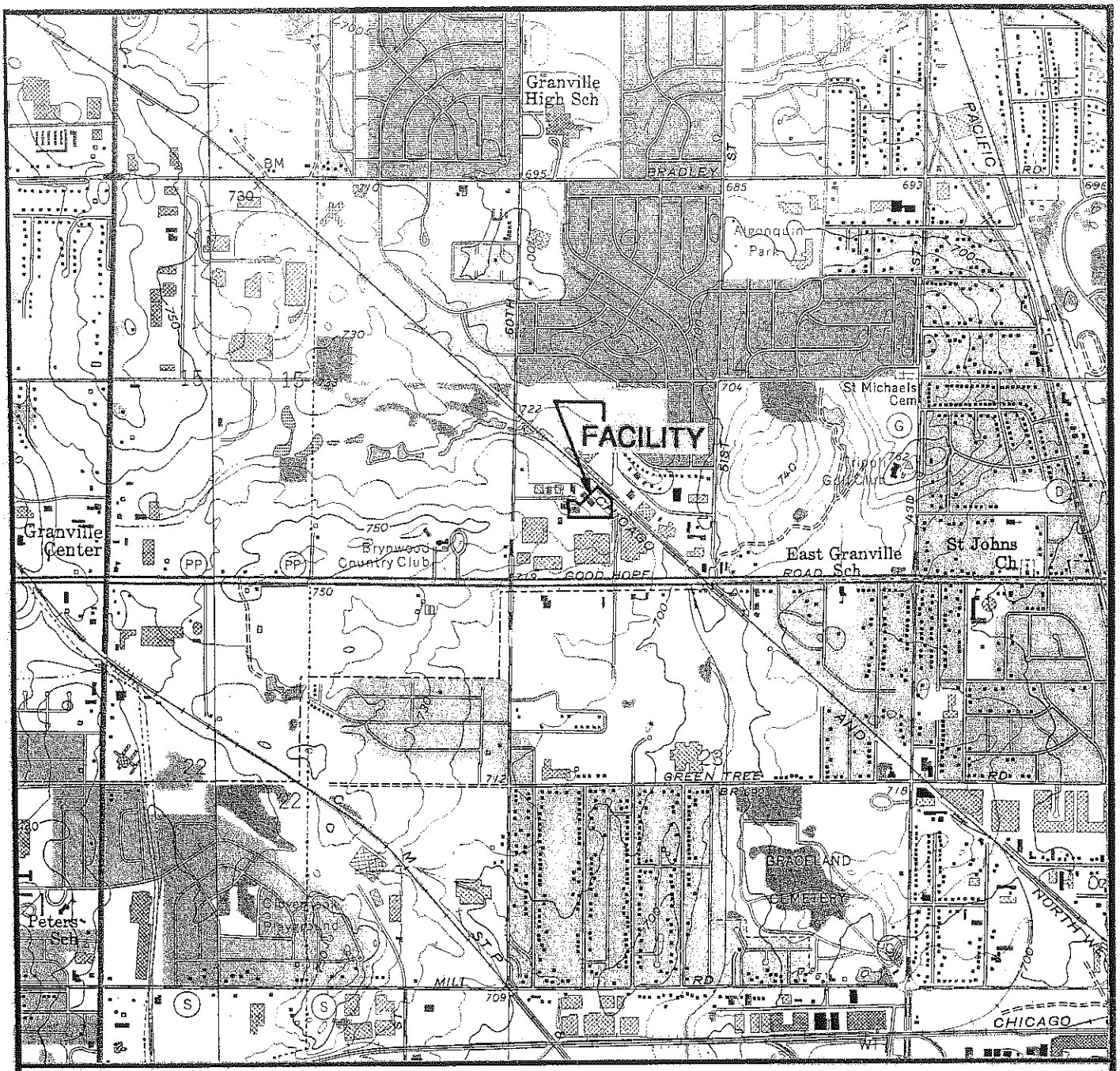
5611 W. Hemlock St. Milwaukee, WI 53223
866-271-0961 • 414-760-9175 • Fax: 414-760-9189 • www.badgerdisposal.com

If you have any questions regarding this matter, please contact me at 414-760-9175 or Kandylee Schmit at 414-760-9175.

Sincerely,
Badger Disposal of WI., Inc.

Henry J. Krier
President

cc: Milwaukee County Federated Library System:
Milwaukee Public Library



STATE LOCATION

SITE LOCATOR MAP

MILWAUKEE, WI

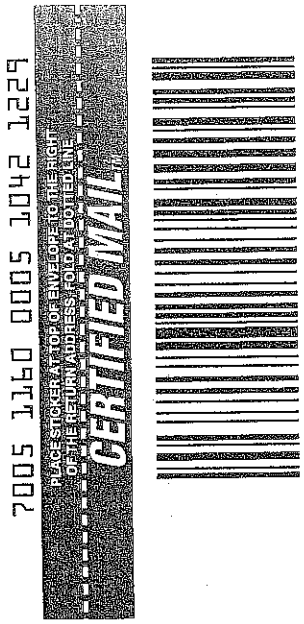
SOURCE: BASE MAP FROM MENOMONEE FALLS, WI
7.5 MINUTE USGS QUADRANGLE DATED 1958,
PHOTOREVISED 1976 AND THIENSVILLE, WI
7.5 MINUTE USGS QUADRANGLE DATED 1958,
PHOTOREVISED 1976.

RMT INC.

DWN. BY:	DKJ
APPROVED BY:	THD
DATE:	JULY 1994
PROJ. #	3057.01
FILE #	30570186

FIGURE 1

Mailed 7/13/05



7005 1160 0005 1042 1229

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: MARK Ryan, Miln. County Clerk
Street, Apt. No.; or PO Box No.: 901 N. 9th St. Room 105
City, State, ZIP+4: Milwaukee, WI 53233

PS Form 3800, June 2002 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Mark Ryan
Milwaukee County Clerk
901 N. 9th Street, Room 105
Milwaukee, WI
53233

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 1160 0005 1042 1229

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
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1. Article Addressed to:

Mr. Mark Ryan
Milwaukee County Clerk
901 N. 9th Street, Room 105
Milwaukee, WI
53233

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) JUL 14 2005 C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 1160 0005 1042 1229

PS Form 3811, February 200 7005 1160 0005 1042 1229 02595-02-M-1540

BADGER DISPOSAL

Badger Disposal of WI, Inc.

CERTIFIED MAIL

July 13, 2005

Mr. Ron Leonhardt
City Clerk
City Clerk's Office, Room 205
200 E. Wells Street
Milwaukee, WI 53202

RE: Local Approval for Renewal of Hazardous Waste Storage Facility Operating License
Badger Disposal of WI., Inc.
5611 W. Hemlock Street
Milwaukee, WI 53223

Dear Mr. Leonhardt,

Badger Disposal of WI., Inc. operates a hazardous waste container storage facility located at 5611 West Hemlock Street, Milwaukee, Wisconsin. The Wisconsin Department of Natural Resources issued Badger Disposal an initial hazardous waste operating license on December 16, 1996. This license expires on December 16, 2006. Badger Disposal of WI. Inc. intends to apply for renewal of their hazardous waste operating license.

The Badger facility is located within the Southwest one-quarter(1/4) of Section Fourteen (14), in Township Eight (8) North, Range Twenty-one (21) East, in the City of Milwaukee, Milwaukee County, Wisconsin. Enclosed please find a map showing the location of the facility.

The purpose of this letter is to determine if there are any new or additional requirements that apply to the Badger Facility, and to receive confirmation that Badger is complying with any local requirements. Assuming we are complying with all local requirements, Badger is hereby requesting a waiver from local approval. This is our initial written request for local approvals. A copy of the Standard Notice which outlines the time limits and requirements for municipalities to participate in the negotiation and arbitration process is attached.

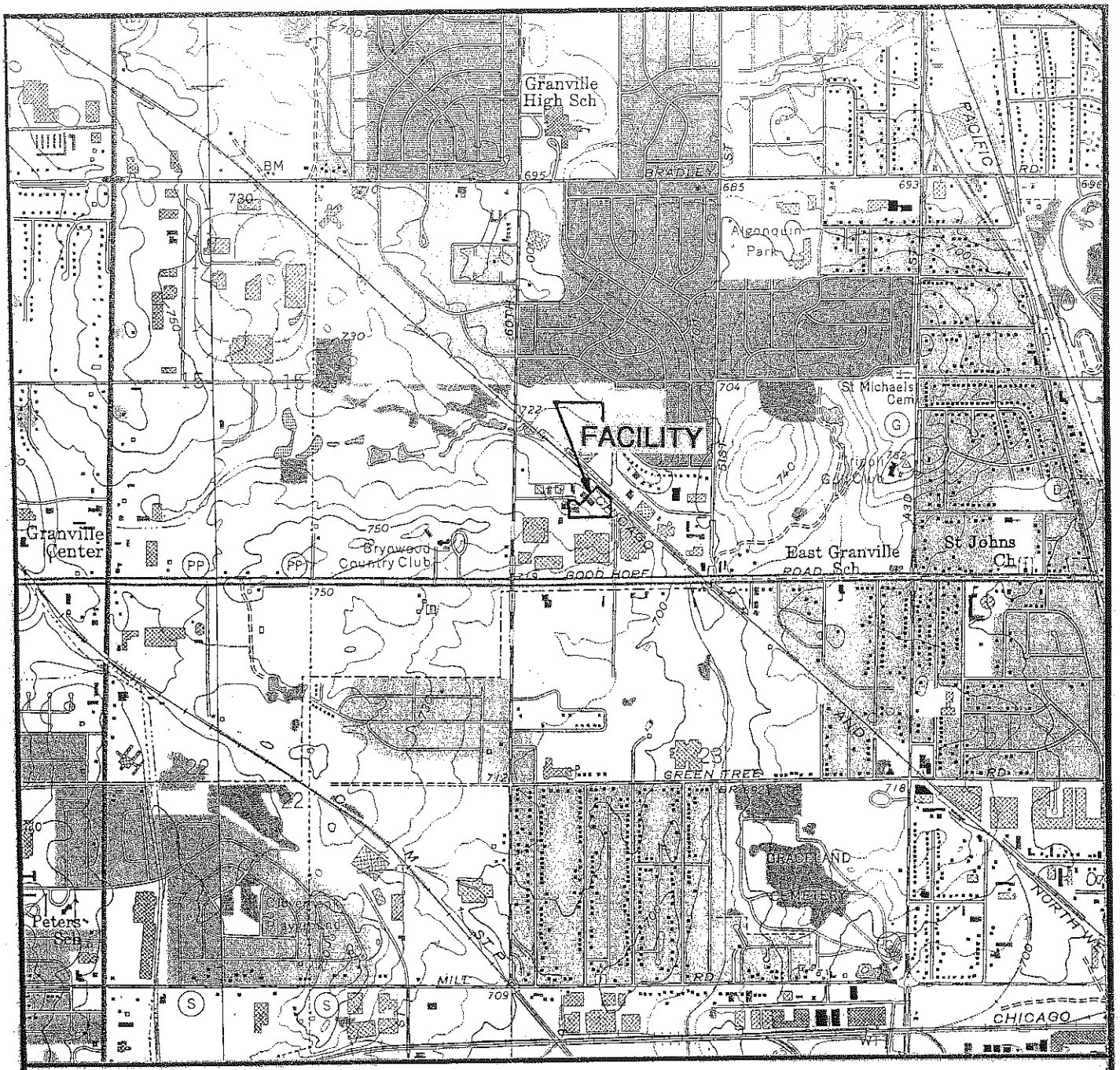
5611 W. Hemlock St. Milwaukee, WI 53223
866-271-0961 • 414-760-9175 • Fax: 414-760-9189 • www.badgerdisposal.com

If you have any questions regarding this matter, please contact me at 414-760-9175 or Kandylee Schmit at 414-760-9175.

Sincerely,
Badger Disposal of WI., Inc.

Henry J. Krier
President

cc: Milwaukee County Federated Library System:
Milwaukee Public Library



STATE LOCATION

SITE LOCATOR MAP

MILWAUKEE, WI

SOURCE: BASE MAP FROM MENOMONEE FALLS, WI
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PHOTOREVISED 1976 AND THIENSVILLE, WI
7.5 MINUTE USGS QUADRANGLE DATED 1958,
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RMT INC.

DWN. BY:	DKJ
APPROVED BY:	THD
DATE:	JULY 1994
PROJ. #	3057.01
FILE #	30570186

FIGURE 1

mailed 7/13/05

7005 1160 0005 1042 1205

CERTIFIED MAIL

7005 1160 0005 1042 1205

7005 1160 0005 1042 1205

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: RON Leonhardt, City Clerk
Street, Apt. No.; or PO Box No.: Room 205, 200 E. Wells Street
City, State, ZIP+4: Milwaukee, WI 53202

PS Form 3800, June 2002 — See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
MR. RON Leonhardt
City Clerk, Room 205
200 E. Wells Street
Milwaukee, WI 53202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 1160 0005 1042 1205

PS Form 3811, February 2004 — Domestic Return Receipt — 102595-02-M-1540

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Ron Leonhardt
City Clerk, Room 205
200 E. Wells Street
Milwaukee, WI 53202

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) S. Brown

C. Date of Delivery 7-14-05

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7005 1160 0005 1042 1205

PS Form 3811, February 200 7005 1160 0005 1042 1205 102595-02-M-1540